# Hepatitis C Virus Core Antigen Monoclonal Antibody (C7-50)

**Catalog Number** MA1-080

## Details

| **Size** | 100 µg |
| **Host/Isotope** | Mouse / IgG1 |
| **Class** | Monoclonal |
| **Type** | Antibody |
| **Clone** | C7-50 |
| **Immunogen** | Purified HCV core-GST fusion protein (genotype 1b). |
| **Conjugate** | Unconjugated |
| **Form** | Liquid |
| **Concentration** | 1 mg/mL |
| **Purification** | Protein A |
| **Contains** | 0.05% sodium azide |
| **Storage Conditions** | -20° C, Avoid Freeze/Thaw Cycles |

## Species Reactivity

<table>
<thead>
<tr>
<th><strong>Species</strong></th>
<th><strong>Reactivity</strong></th>
<th><strong>Published</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Virus</td>
<td>Virus</td>
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</table>

## Tested Applications

<table>
<thead>
<tr>
<th><strong>Application</strong></th>
<th><strong>Dilution</strong></th>
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<tbody>
<tr>
<td>ELISA (ELISA)</td>
<td>Assay-dependent</td>
</tr>
<tr>
<td>Flow Cytometry (Flow)</td>
<td>1/100</td>
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<tr>
<td>Immunoprecipitation (IP)</td>
<td>Assay-dependent</td>
</tr>
<tr>
<td>Western Blot (WB)</td>
<td>1 µg/mL</td>
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<tr>
<td>Immunocytochemistry (ICC/IF)</td>
<td>Assay-dependent</td>
</tr>
</tbody>
</table>

## Published Applications

<table>
<thead>
<tr>
<th><strong>Application</strong></th>
<th><strong>References</strong></th>
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<tbody>
<tr>
<td>Western Blot (WB)</td>
<td>See 43 publications below</td>
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<tr>
<td>Immunocytochemistry (ICC/IF)</td>
<td>See 55 publications below</td>
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<tr>
<td>Immunoprecipitation (IP)</td>
<td>See 1 publications below</td>
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<tr>
<td>Flow Cytometry (Flow)</td>
<td>See 4 publications below</td>
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<tr>
<td>Miscellaneous PubMed (Misc)</td>
<td>See 2 publications below</td>
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<tr>
<td>ELISA (ELISA)</td>
<td>See 2 publications below</td>
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<tr>
<td>Immunohistochemistry (IHC)</td>
<td>See 3 publications below</td>
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* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

## Product specific information

MA1-080 detects hepatitis C virus (HCV) core protein from transfected human and primate cell lines. MA1-080 has been successfully used in Western blot, immunoprecipitation, immunofluorescence and ELISA procedures. By Western blot, this antibody detects a single ~21 kDa protein representing HCV core protein in various transfected cell lines. Immunofluorescence staining of HCV core protein in transfected chimp hepatocytes yields a staining pattern consistent with cytoplasmic and vesicular staining. The MA1-080 immunogen is purified HCV core-GST fusion protein (genotype 1b). This antibody recognizes an epitope between amino acid residues 21-40 of HCV core protein. This sequence is conserved among different HCV strains.

## Background/Target Information

HCV is a positive, single-stranded RNA virus in the Flaviviridae family. The genome is approximately 10,000 nucleotides and encodes a single polyprotein of about 3,000 amino acids. The polyprotein is processed by host cell and viral proteases into three major structural proteins and several non-structural protein necessary for viral replication. Several different genotypes of HCV with slightly different genomic sequences have since been identified that correlate with differences in response to treatment with interferon alpha.

### PubMed References For Hepatitis C Virus Core Antigen Monoclonal Antibody (C7-50)

<table>
<thead>
<tr>
<th>Species / Dilution</th>
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<tr>
<td><strong>Virus / 1:2000</strong></td>
<td>MA1-080 was used in western blot to study HCV assembly using genotype 1a H77S</td>
</tr>
<tr>
<td><strong>Virus / Not Cited</strong></td>
<td>MA1-080 was used in western blot to investigate the effect of RNase L on Hepatitis C viral RNA cleavage</td>
</tr>
<tr>
<td><strong>Virus / Not Cited</strong></td>
<td>MA1-080 was used in Western Blotting to uncover a critical function of TG in the folding of core and HCV replication and reveals, more broadly, how TG accumulation in the ER may provoke the binding of soluble amphipathic helix-containing proteins to the ER bilayer.</td>
</tr>
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<td>MA1080 was used in western blot to determine the effect of the hepatitis C viral load on host DNA damage</td>
</tr>
<tr>
<td><strong>Virus / Not Cited</strong></td>
<td>MA1-080 was used in western blot to study the mechanisms underlying cell-cell contact-mediated HCV transfer and infection</td>
</tr>
<tr>
<td><strong>Virus / 1 μg/mL</strong></td>
<td>Journal of virology (Aug 2013; 87: 8545) &quot;Cell-cell contact-mediated hepatitis C virus (HCV) transfer, productive infection, and replication and their requirement for HCV receptors.&quot; Author(s): Liu Z, He JJ. PubMed Article URL: <a href="http://dx.doi.org/10.1128/JVI.01062-13">http://dx.doi.org/10.1128/JVI.01062-13</a></td>
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<td>MA1-080 was used in Western Blotting to describe the first rationally designed viroinhibinor with a comprehensive structure-activity relationship (SAR).</td>
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</table>


Products are warranted to operate and perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Product documentation, specifications and/or accompanying package inserts (“Documentation”). No claim of suitability for use in any application regulated by FDA is made. The warranty period shall be limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

Virus / Not Cited

MA1-080 was used in western blot to study the regulation of HCV replication by let-7b

"Let-7b is a novel regulator of hepatitis C virus replication."
Author(s):Cheng JC,Yeh YJ,Tseng CP,Hau SD,Chang YL,Sakamoto N,Huang HD
PubMed Article URL:http://dx.doi.org/10.1007/s00018-012-0940-6

Virus / Not Cited

MA1-080 was used in western blot to identify the hepatoprotective component in silymarin

Proceedings of the National Academy of Sciences of the United States of America (Mar 2010; 107: 5995)
"Identification of hepatoprotective flavonolignans from silymarin."
PubMed Article URL:http://dx.doi.org/10.1073/pnas.0914009107

Virus / Not Cited

MA1-080 was used in western blot to investigate the mechanism for phosphatidylinositol 3-kinase- and ERK-mediated regulation of hepatitis C virus RNA replication.

The Journal of biological chemistry (Apr 2007; 282: 11836)
"p21-activated kinase 1 is activated through the mammalian target of rapamycin/p70 S6 kinase pathway and regulates the replication of hepatitis C virus in human hepatoma cells."
Author(s):Ishida H,Li K,Yi M,Lemon SM
PubMed Article URL:http://dx.doi.org/10.1074/jbc.M610106200

Virus / Not Cited

MA1-080 was used in western blot to study the role of p53 function in the mechanism by which overexpression of protein phosphatase-2A promotes hepatocellular carcinogenesis

Carcinogenesis (Jan 2014; 35: 114)
"Protein phosphatase 2A promotes hepatocellular carcinogenesis in the diethylnitrosamine mouse model through inhibition of p53."
Author(s):Duong FH,Dill MT,Matter MS,Makowska Z,Calabrese D,Diethe S,Ketterer T,Terracciano L,Heim MH
PubMed Article URL:http://dx.doi.org/10.1093/carcin/bgt258

Virus / 1 µg/mL

MA1-080 was used in western blot to produce non-replicative, yet infectious, HCV virions

Journal of virology (Sep 2004; 78: 9257)
"Unique features of hepatitis C virus capsid formation revealed by de novo cell-free assembly."
Author(s):Klein KC,Polyak SJ,Lingappa JR
PubMed Article URL:http://dx.doi.org/10.1128/JVI.78.17.9257-9269.2004

Virus / Not Cited

MA1-080 was used in western blot to study basic residues in the HCV core that are essential both for NS5A complex formation and viral infectivity

Journal of virology (Apr 2011; 54: 612)
"HIV infection increases HCV-induced hepatocyte apoptosis."
PubMed Article URL:http://dx.doi.org/10.1101/j.jhep.2010.07.042

Virus / Not Cited

MA1-080 was used in western blot to study basic residues in the HCV core that are essential both for NS5A complex formation and viral infectivity

PloS one (Jan 2015; 9: )
"HCV core residues critical for infectivity are also involved in core-NS5A complex formation."
Author(s):Gawlik K,Baugh J,Chatterji J,Lim PJ,Bobartd MD,Galley PA
PubMed Article URL:http://dx.doi.org/10.1371/journal.ppat.1008866

Virus / Not Cited

MA1-080 was used in western blot to study the ability of measles viruses expressing HCV capsid and envelope proteins to elicit an HCV neutralizing immune response

Journal of virology (Nov 2012; 86: 11558)
"Broadly neutralizing immune responses against hepatitis C virus induced by vectored measles viruses and a recombinant envelope protein booster."
PubMed Article URL:http://dx.doi.org/10.1128/JVI.01776-12
MA1-080 was used in Western Blotting to study the mechanism of miRNA in IFN mediated host response.

**Virus / Not Cited**

The Journal of biological chemistry (Apr 2018; 293: 5975)

"Interferon down-regulation of miR-1225-3p as an antiviral mechanism through modulating Grb2-associated binding protein 3 expression."

Author(s): Cheng M, Niu Y, Fan J, Chi X, Liu X, Yang W

PubMed Article URL: http://dx.doi.org/10.1074/jbc.RA117.000738

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MA1-080 was used in western blot to study the ability of aptamers against HCV NS5B RNA helicase to inhibit viral replication

**Virus / Not Cited**

Journal of virology (Jun 2013; 87: 7066)

"Inhibition of hepatitis C virus (HCV) replication by specific RNA aptamers against HCV NS5B RNA replicase."


PubMed Article URL: http://dx.doi.org/10.1128/JVI.00405-13

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MA1-080 was used in Western Blotting to suggest a mechanism by which the viruses adapt to attenuate cellular antiviral activity and to establish persistent infection.

**Virus / Not Cited**

FEBS letters (May 2012; 586: 1272)

"Modulation of the type I interferon pathways by culture-adaptive hepatitis C virus core mutants."

Author(s): Kang JI, Kwon YC, Ahn BY

PubMed Article URL: http://dx.doi.org/10.1016/j.febslet.2012.03.062

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MA1-080 was used in western blot to study the mechanism by which hepatitis C virus NS2 protein contributes to virus particle assembly

**Virus / Not Cited**

Journal of virology (Sep 2009; 83: 8379)

"Hepatitis C virus NS2 protein contributes to virus particle assembly via opposing epistatic interactions with the E1-E2 glycoprotein and NS3-NS4A enzyme complexes."

Author(s): Phan T, Beran RK, Peters C, Lorenz IC, Linderbach BD

PubMed Article URL: http://dx.doi.org/10.1128/JVI.00891-09

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MA1-080 was used in western blot to identify the specific Toll-like receptor agonists and RNA viruses that can induce the expression of NKG2DLs on mDCs

**Virus / Not Cited**

International immunology (Oct 2007; 19: 1145)

"Induction of NKG2D ligands on human dendritic cells by TLR ligand stimulation and RNA virus infection."

Author(s): Ebihara T, Masuda H, Akazawa T, Shingai M, Kikuta H, Ariga T, Matsumoto M, Seya T

PubMed Article URL: http://dx.doi.org/10.1010/j.intimm/dxm073

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MA1-080 was used in western blot to study the release of hepatitis C virus controlled by alpha-taxilin

**Virus / Not Cited**

The Biochemical journal (Jan 2016; 473: 145)

"Characterization of -taxilin as a novel factor controlling the release of hepatitis C virus."


PubMed Article URL: http://dx.doi.org/10.1042/BJ20150717

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MA1-080 was used in western blot to study the inhibitory effect of IL28B on hepatitis C virus replication and its mechanism

**Virus / Not Cited**


"IL28B inhibits hepatitis C virus replication through the JAK-STAT pathway."

Author(s): Zhang L, Jilg N, Shao RX, Lin W, Fusco DN, Zhao H, Goto K, Peng LF, Chen WC, Chung RT

PubMed Article URL: http://dx.doi.org/10.1016/j.jhep.2010.11.019

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MA1-080 was used in Western Blotting to suggest a mechanism by which the viruses adapt to attenuate cellular antiviral activity and to establish persistent infection.

**Virus / Not Cited**

Journal of virology (Jun 2014; 88: 5956)

"Hepatitis C virus NS5A hijacks ARFGAP1 to maintain a phosphatidylinositol 4-phosphate-enriched microenvironment."

Author(s): Li H, Yang X, Yang G, Hong Z, Zhou L, Yin P, Xiao Y, Chen L, Chung RT, Zhang L

PubMed Article URL: http://dx.doi.org/10.1128/JVI.03738-13

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MA1-080 was used in western blot to investigate the influence of iron on hepatitis C virus replication

**Virus / Not Cited**

Journal of virology (Dec 2010; 53: 995)

"Iron inhibits replication of infectious hepatitis C virus in permissive Huh7.5.1 cells."

Author(s): Fillebeen C, Pantopoulos K

PubMed Article URL: http://dx.doi.org/10.1016/j.jhep.2010.04.044

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Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts (“Documentation”). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, the warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to the Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

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MA1-080 was used in western blot to study the role of hepatitis C virus core protein in the changes of mitochondrial function.

Journal of viral hepatitis (Nov 2010; 17: 784)
"Role of Hepatitis C Virus Core Protein in Viral-induced Mitochondrial Dysfunction."
Author(s): Wang T, Campbell RV, Yi MK, Lemon SM, Weinman SA
PubMed Article URL: http://dx.doi.org/10.1111/j.1365-2893.2009.01238.x

World journal of hepatology (Feb 2021; 13: 187)
"Adult human liver slice cultures: Modelling of liver fibrosis and evaluation of new anti-fibrotic drugs."
PubMed Article URL: http://dx.doi.org/10.4254/wjh.v13.i2.187

MA1-080 was used in Western Blot to investigate human liver fibrogenesis and anti-fibrotic therapies, through evaluating the three dimensional ex vivo liver slice model.

Cells (Apr 2020; 9: )
"Targeting Autophagy Augments BBR-Mediated Cell Death in Human Hepatoma Cells Harboring Hepatitis C Virus RNA."
Author(s): Tai CJ, Jassey A, Liu CH, Tai C J, Richardson CD, Wong SH, Lin LT
PubMed Article URL: http://dx.doi.org/10.3390/cells9040908

MA1-080 was used in western blot to show that berberine treatment induced a biphasic cell death irrespective of the presence of HCV subgenomic replicon RNA.

Gastroenterology (Jun 2010; 138: 2509)
"Hepatitis C virus regulates transforming growth factor beta1 production through the generation of reactive oxygen species in a nuclear factor kappaB-dependent manner."
Author(s): Lin W, Tsai WL, Shao RX, Wu G, Peng LF, Barlow LL, Chung WJ, Zhang L, Zhao H, Jang JY, Chung RT
PubMed Article URL: http://dx.doi.org/10.1053/j.gastro.2010.03.008

MA1-080 was used in western blot to investigate the mechanism for the regulatory effect of hepatitis C virus on and transforming growth factor beta 1 in hepatic fibrosis.

PloS one (Jan 2016; 9: )
"Visualization and analysis of hepatitis C virus structural proteins at lipid droplets by super-resolution microscopy."
Author(s): Eggert D, Rösch K, Reimer R, Herker E
PubMed Article URL: http://dx.doi.org/10.1371/journal.pone.0102511

MA1-080 was used in western blot to use super-resolution microscopy to visualize and analyze hepatitis C virus structural proteins at lipid droplets.

Biochemical and biophysical research communications (Aug 2011; 412: 92)
"Alterations in microRNA expression profile in HCV-infected hepatoma cells: involvement of miR-491 in regulation of HCV replication via the PI3 kinase/Akt pathway."
Author(s): Tahira H, Tatsutomi T, Hosui A, Nakai T, Kodama T, Shimizu S, Hikita H, Hiramatsu N, Kanto T, Hayashi N, Takehara T
PubMed Article URL: http://dx.doi.org/10.1016/j.bbrc.2011.07.049

MA1-080 was used in western blot to investigate microRNAs affected by HCV infection in HuH7 cells.

Hepatology (Baltimore, Md.) (Nov 2011; 54: 1570)
"Vitamin D: an innate antiviral agent suppressing hepatitis C virus in human hepatocytes."
PubMed Article URL: http://dx.doi.org/10.1002/hep.24575

MA1-080 was used in western blot to investigate the effectiveness of vitamin D for HCV treatment.

Biochemical and biophysical research communications (Feb 2011; 85: 1193)
"The acidic domain of hepatitis C virus NS4A contributes to RNA replication and virus particle assembly."
Author(s): Phan T, Kohlway A, Dimberu P, Pyle AM, Lindenbach BD
PubMed Article URL: http://dx.doi.org/10.1128/JVI.01889-10
MA1-080 was used in western blot to investigate the effect of suppressor of cytokine signaling 3 SOCS3 on hepatitis C virus replication and its mechanism.

Journal of virology (Jun 2010; 84: 6060)
"Suppressor of cytokine signaling 3 suppresses hepatitis C virus replication in an mTOR-dependent manner."
Author(s):Shao RX,Zhang L,Peng LF,Sun E,Chung WJ,Jang JY,Tsai WL,Hypolite G,Chung RT
PubMed Article URL:http://dx.doi.org/10.1128/JVI.02484-09

MA1-080 was used in western blot to study the role of protein kinase D in HCV secretion via its effects on ceramide transfer protein and oxysterol binding protein.

Virus: 1:2500
The Journal of biological chemistry (Apr 2011; 286: 11265)
"Protein kinase D negatively regulates hepatitis C virus secretion through phosphorylation of oxysterol-binding protein and ceramide transfer protein."
Author(s):Amako Y,Syed GH,Siddiqi A
PubMed Article URL:http://dx.doi.org/10.1074/jbc.M110.182097

MA1-080 was used in western blot to identify host genes involved in producing the antiviral effect of interferon-alpha.

Virus: Not Cited
Journal of hepatology (Feb 2012; 56: 326)
“A functional genomic screen reveals novel host genes that mediate interferon-alpha’s effects against hepatitis C virus.”
PubMed Article URL:http://dx.doi.org/10.1016/j.jhep.2011.07.026

MA1-080 was used in Western Blotting to determine the role of microRNA-122 in hepatocyte intrinsic innate immunity.

Virus: Not Cited
eLife (Feb 2019; 8: )
"MicroRNA122 supports robust innate immunity in hepatocytes by targeting the RTKs/STAT3 signaling pathway."
Author(s):Xu H,Xu SJ,Xie SJ,Zhang Y,Yang JH,Zhang WQ,Zheng MN,Zhou H,Qu LH
PubMed Article URL:http://dx.doi.org/10.7554/eLife.41159

MA1-080 was used in Western Blotting to elucidate the mechanisms of Simeprevir treatment of Hepatitis C virus failure due to NS3-Q80K.

Virus: Not Cited
Antimicrobial agents and chemotherapy (Jul 2018; 62: )
"Unexpected Replication Boost by Simeprevir for Simeprevir-Resistant Variants in Genotype 1a Hepatitis C Virus."
PubMed Article URL:http://dx.doi.org/10.1128/AAC.009502

MA1-080 was used in western blot to develop a cell-based FRET assay for high-throughput anti-HCV compound screening.

Virus: Not Cited
Antimicrobial agents and chemotherapy (Oct 2009; 53: 4311)
"Development of a cell-based hepatitis C virus infection fluorescent resonance energy transfer assay for high-throughput antiviral compound screening."
Author(s):Yi X,Saine B,Uprichard SL
PubMed Article URL:http://dx.doi.org/10.1128/AAC.02601-17

MA1-080 was used in Western Blotting to conclude that unlike for host cellular mRNAs, the entire eIF3 is not required for HCV RNA translation, favoring viral expression under conditions of low eIF3e levels.

Virus: Not Cited
The Journal of biological chemistry (Feb 2020; 295: 1843)
"Unlike for cellular mRNAs and other viral internal ribosome entry sites (IRESs), the eIF3 subunit e is not required for the translational activity of the HCV IRES."
Author(s):Panthu B,Denolli S,Faivre-Moskalenko C,Ohmann T,Cosset FL,Jalinot P
PubMed Article URL:http://dx.doi.org/10.1074/jbc.RA119.009502

MA1-080 was used in Western Blotting to determine the role of microRNA-122 in hepatocyte intrinsic innate immunity.

Virus: Not Cited
Antimicrobial agents and chemotherapy (Oct 2009; 53: 4311)
"Development of a cell-based hepatitis C virus infection fluorescent resonance energy transfer assay for high-throughput antiviral compound screening."
Author(s):Yi X,Saine B,Uprichard SL
PubMed Article URL:http://dx.doi.org/10.1128/AAC.009502

MA1-080 was used in western blot to develop a cell-based FRET assay for high-throughput anti-HCV compound screening.

Virus: 1:1000
Antimicrobial agents and chemotherapy (Oct 2009; 53: 4311)
"Development of a cell-based hepatitis C virus infection fluorescent resonance energy transfer assay for high-throughput antiviral compound screening."
Author(s):Yi X,Saine B,Uprichard SL
PubMed Article URL:http://dx.doi.org/10.1128/AAC.009502

MA1-080 was used in western blot to study the role of elevated phosphatidylinositol 4-phosphate levels in promoting HCV infection and the involvement of ARF1 and GBF1.

Mouse / Not Cited
PloS one (Aug 2012; 7: )
"ARF1 and GBF1 generate a PI4P-enriched environment supportive of hepatitis C virus replication."
Author(s):Zhang L,Hong Z,Lin W,Shao RX,Goto K,Hsu VW,Chung RT
PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0032135

55 Immunochemistry References

<table>
<thead>
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</table>
MA1-080 was used in immunocytochemistry to study the therapeutic potential of antiviral nanoparticles containing a HCV NSSA-based peptide in HIV/HCV co-infected patients

**Virus / Not Cited**

Biomaterials (May 2013; 34: 3846)

"Antiviral peptide nanocomplexes as a potential therapeutic agent for HIV/HCV co-infection."  

PubMed Article URL: http://dx.doi.org/10.1016/j.biomaterials.2013.01.026

MA1-080 was used in immunocytochemistry and western blot to study the role of the NS2 viral protein in HCV infectivity

**Virus / 1:300-1:400**

PLoS pathogens (May 2009; 5: )

"Trans-complementation of an NS2 defect in a late step in hepatitis C virus (HCV) particle assembly and maturation."  
Author(s): Yi M, Ma Y, Yates J, Lemon SM

PubMed Article URL: http://dx.doi.org/10.1371/journal.ppat.1000403

MA1-080 was used in immunocytochemistry to study the ability of 5-(perylen-3-yl)ethynyl-arabino-uridine to inhibit the fusion of enveloped viruses by mimicking the shape and amphipathicity of phospholipids

**Virus / 1:300**

Journal of virology (Apr 2013; 87: 3640)

"5-(Perylen-3-yl)ethynyl-arabino-uridine (aUY11), an arabino-based rigid amphipathic fusion inhibitor, targets virion envelope lipids to inhibit fusion of influenza virus, hepatitis C virus, and other enveloped viruses."  
Author(s): Colitpis CC, Ustinov AV, Epand RF, Epand RM, Korshun VA, Schang LM

PubMed Article URL: http://dx.doi.org/10.1128/JVI.02882-12

MA1-080 was used in immunocytochemistry to investigate hepatitis C virus cycle in Matrigel-embedded Huh-7.5 cells cultures

**Virus / Not Cited**

Virology (Mar 2012; 425: 31)

"Matrigel-embedded 3D culture of Huh-7 cells as a hepatocyte-like polarized system to study hepatitis C virus cycle."  


MA1-080 was used in immunocytochemistry to study HCV lipoviral formation and the role of interactions between viral glucoproteins and the ApoE and ApoB apolipoproteins

**Virus / Not Cited**

The Journal of biological chemistry (Jul 2014; 289: 18904)

"The association of hepatitis C virus glycoproteins with apolipoproteins E and B early in assembly is conserved in lipoviral particles."  
Author(s): Boyer A, Dumans A, Beaumont E, Etienne L, Roingeard P, Meunier JC

PubMed Article URL: http://dx.doi.org/10.1074/jbc.M113.538256

MA1-080 was used in immunocytochemistry to explore the various cytopathic effects of and cellular responses to HCV proteins

**Virus / 1:1,000**

PloS one (Jul 2012; 6: )

"Persistent expression of hepatitis C virus non-structural proteins leads to increased autophagy and mitochondrial injury in human hepatoma cells."  
Author(s): Chu VC, Bhattacharya S, Nomoto A, Lin J, Zaidi SK, Oberley TD, Weinman SA, Azhar S, Huang TT

PubMed Article URL: http://dx.doi.org/10.1371/journal.pone.0028551

MA1-080 was used in immunocytochemistry to design and characterize novel IFN-lambda analogs as antiviral biologics

**Virus / Not Cited**

Drug design, development and therapy (Oct 2016; 10: 163)

"Design and evaluation of novel interferon lambda analogs with enhanced antiviral activity and improved drug attributes."  
Author(s): Yu D, Zhao M, Dong L, Zhao L, Zou M, Sun H, Zhang M, Liu H, Zou Z

PubMed Article URL: http://dx.doi.org/10.2147/DDDT.S91455

MA1-080 was used in immunocytochemistry to study the role of IGF2BP1 downregulation in the anti-HCV activity of the IFN-alpha/IL-28B-regulated let7 miRNA

**Virus / Not Cited**

Journal of virology (Sep 2013; 87: 9707)

"High-throughput profiling of alpha interferon- and interleukin-28B-regulated microRNAs and identification of let-7s with anti-hepatitis C virus activity by targeting IGF2BP1."  

PubMed Article URL: http://dx.doi.org/10.1128/JVI.00802-13

MA1-080 was used in immunocytochemistry and western blot to study the role of the HCV p7 protein in preventing the premature degradation of HCV glycoproteins during virus generation.

Virus research (Sep 2013; 176: 199)
"Evidence suggesting that HCV p7 protects E2 glycoprotein from premature degradation during virus production."
Author(s): Atoom AM, Jones DM, Russell RS
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Virus / 1:200

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**Species / Dilution**

**Summary**

MA1-080 was used in immunocytochemistry to study the role of the interaction between TIP47 and Rab9 in the release of HCV viral particles.

**1 Immunoprecipitation References**

**Species / Dilution**

**Summary**

MA1-080 was used in Immunoprecipitation to study the assembly mechanisms of Hepatitis C virus in association with endoplasmic reticulum detergent-resistant membranes.

**Virus / 3 µg/mL**

**Summary**

MA1-080 was used in immunocytochemistry to develop an HCV growth assay suitable for the rapid screening of compound libraries for molecules with antiviral activity.

**Virus / Not Cited**

**Summary**

MA1-080 was used in immunocytochemistry and western blot to study the role of the interaction between TIP47 and Rab9 in the release of HCV viral particles.

**4 Flow Cytometry References**

**Species / Dilution**

**Summary**

MA1-080 was used in Immunoprecipitation to study the assembly mechanisms of Hepatitis C virus in association with endoplasmic reticulum detergent-resistant membranes.

**Virus / Not Cited**

**Summary**

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**Virus / Not Cited**

**Summary**

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**Virus / 1:300**

**Summary**

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**Virus / Not Cited**

**Summary**

This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

**Species / Dilution**

**Summary**

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**Summary**

MA1-080 was used in Immunocytochemistry to study the role of lipoperoxidation in infection with hepatitis C virus.
MA1-080 was used in Flow Cytometry to study the upregulation of hepatocyte cell surface expression of CD55 in response to HCV infection and the significance for immune evasion.

2 Miscellaneous PubMed References

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2 ELISA References

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### 3 Immunohistochemistry References

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### References

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