CD117 (c-Kit) Monoclonal Antibody (ACK2), eBioscience™

Catalog Number 14-1172-82

Details

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<tr>
<td>Size</td>
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<td>Form</td>
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<td>Purification</td>
<td>Affinity chromatography</td>
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<td>Storage buffer</td>
<td>PBS, pH 7.2</td>
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<td>Contains</td>
<td>0.09% sodium azide</td>
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<td>Storage Conditions</td>
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Species Reactivity

<table>
<thead>
<tr>
<th>Species Reactivity</th>
<th>Human, Mouse, Rat</th>
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<tr>
<td>Published species</td>
<td>Rat, Mouse, Human, Chicken, Not Applicable, Guinea pig</td>
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Tested Applications

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<tr>
<th>Tested Applications</th>
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<tr>
<td>Flow Cytometry (Flow)</td>
<td>0.125 µg/test</td>
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<tr>
<td>Functional Assay (FN)</td>
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<td>Flow Cytometry (Flow)</td>
<td>Assay-Dependent</td>
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<tr>
<td>Western Blot (WB)</td>
<td>Assay-Dependent</td>
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<td>Western Blot (WB)</td>
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Published Applications

- Immunohistochemistry (IHC)
- Immunocytochemistry (ICC/IF)
- Flow Cytometry (Flow)
- Western Blot (WB)
- Functional Assay (FN)
- Neutralization (Neu)
- Inhibition Assays (IA)

Published Applications:
See 15 publications below
See 9 publications below
See 21 publications below
See 2 publications below
See 2 publications below
See 1 publications below
See 1 publications below

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.

Background/Target Information

c-Kit, also known as mast/stem cell growth factor receptor (SCFR) or CD117, is a trans membrane type III tyrosine kinase receptor encoded by the c-Kit proto-oncogene, located on chromosome 4 in humans. It is expressed in hematopoietic stem cells, germ cells, mast cells and gastrointestinal tract Cajal cells. Upon binding of its ligand stem cell factor (SCF), c-kit dimersizes, resulting in receptor activation and autophosphorylation of various tyrosine residues including tyrosine 703 located on the cytoplasmic domain of the receptor. This modification allows docking of Grb2 and activation of the Ras/ERK signaling pathway. SCF/c-kit can activate multiple downstream signaling pathways including PI3K, PLC-gamma and JAK/STAT. c-kit receptor activation is essential for proliferation and differentiation of hematopoietic progenitor cells. CD117 is also expressed by mast cells and plays a role in signaling and activation of these cells. ACK2 has been reported to be a blocking antibody. Applications Tested: The ACK2 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, immunoblotting (WB), and immunohistochemical staining of frozen tissue sections. It has also been reported for use in functional assays. (Please use Functional Grade purified ACK2, cat. 16-1172, in functional assays.) (Fluorochrome-conjugated ACK2 is recommended for use in flow cytometric analysis.) Applications Reported: The ACK2 antibody has been reported for use in functional assays.


Thermo Fisher Scientific
1025 Science Center Drive
San Diego, CA 92121

Website: thermofisher.com/ebioscience
Customer Service (US): 1-888-999-1371
thermofisher.com/contactus

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Adjustment of pH to 7.2 with PBS.

Thermo Fisher Scientific is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animal.
Western blot was performed using Anti-CD117 (c-Kit) Monoclonal Antibody (ACK2), eBioscience™ (Product # 14-1172-82) and a 55kDa band corresponding to Mast/stem cell growth factor receptor Kit was observed across tissues tested. Whole cell extracts (30 µg lysate) of Mouse Lung (Lane 1), Mouse Bone Marrow (Lane 2), Rat Bone Marrow (Lane 3), Mouse Kidney (Lane 4), Rat Kidney (Lane 5), Rat Lung (Lane 6), Mouse Spleen (Lane 7), Rat Spleen (Lane 8), Mouse Thymus (Lane 9) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 Dilution) and detected by chemiluminescence with F(ab2-Rabbit anti-Rat IgG (H+L Secondary Antibody, HRP (Product # PA1-29927, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005). Expression of cKIT was found to be higher in Mouse bone marrow, Rat bone marrow, Mouse spleen and Mouse thymus as compared to Mouse lung, Rat lung, Mouse kidney and rat kidney.
<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
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<tbody>
<tr>
<td>Guinea pig / 1:100</td>
<td>14-1172 was used in Immunohistochemistry to identify and elucidate the physiological relevance of Ca2+-activated K+ currents in freshly isolated guinea pig interstitial cells of Cajal.</td>
</tr>
<tr>
<td>Mouse / 1:200</td>
<td>14-1172 was used in Immunohistochemistry to examine the role and mechanisms of stem cell factor as a guidance cue in the central nervous system.</td>
</tr>
<tr>
<td>Mouse / Not Cited</td>
<td>Biology of reproduction (Aug 2010; 83: 244) &quot;Time-dependent disruption of oviduct pacemaker cells by Chlamydia infection in mice.&quot; Author(s): Dixon RE, Ramsey KH, Schirripa JM, Sanders KM, Ward SM PubMed Article URL: <a href="http://dx.doi.org/10.1095/biolreprod.110.083808">http://dx.doi.org/10.1095/biolreprod.110.083808</a></td>
</tr>
</tbody>
</table>
14-1172 was used in Immunohistochemistry to investigate the role of signalling via THPO and its receptor, MPL, in the interaction of quiescent HSCs with their niche.

Mouse / Not Cited

Cell stem cell (Dec 2007; 1: 685)

"Thrombopoietin/MPL signaling regulates hematopoietic stem cell quiescence and interaction with the osteoblastic niche."


PubMed Article URL:http://dx.doi.org/10.1016/j.stem.2007.10.020

14-1172 was used in Immunohistochemistry to investigate the molecular and functional diversity of GABA-A receptors in the mouse colon.

Mouse / 1:250

The Journal of neuroscience : the official journal of the Society for Neuroscience (Jul 2014; 34: 10361)

"Molecular and functional diversity of GABA-A receptors in the enteric nervous system of the mouse colon."

Author(s): Seifi M, Brown JF, Mills J, Bhandari P, Belelli D, Lambert J, Rudolph U, Sonny JD

PubMed Article URL:http://dx.doi.org/10.1523/JNEUROSCI.0441-14.2014

14-1172 was used in Immunohistochemistry to determine the role of macrophages in the development of delayed gastric emptying, in diabetic gastroparesis, using Csf1(op/op) mice.

Mouse / Not Cited

Cellular and molecular gastroenterology and hepatology (Jan 2016; 2: 40)

"Diabetic db/db mice lacking macrophages are protected against the development of delayed gastric emptying."

Author(s): Cipriani G, Gibbons SJ, Verhulst PJ, Choi KM, Eisenman ST, Hein SS, Ordog T, Linden DR, Szurszewski JH, Farrugia G

PubMed Article URL:http://dx.doi.org/10.1016/j.jcmgh.2015.09.001

14-1172 was used in Immunohistochemistry to demonstrate that ICC-MY potently produce dihydropiridine sensitive L-type voltage-dependent Ca(2+) currents.

Guinea pig / 1:100


"Voltage-dependent Ca Current Identified in Freshly Isolated Interstitial Cells of Cajal (ICC) of Guinea-pig Stomach."

Author(s): Kim YC, Suzuki H, Xu WX, Hashitani H, Choi W, Yun HY, Park SM, Yoon SJ, Lee SJ, Lee SJ


14-1172 was used in Immunohistochemistry to demonstrate that melastatin-type transient receptor potential channel 7 is necessary for intestinal pacemaking.

Mouse / Not Cited

Gastroenterology (Nov 2005; 129: 1504)

"Melastatin-type transient receptor potential channel 7 is required for intestinal pacemaking activity."

Author(s): Kim BJ, Lim HH, Yang DK, Jun JY, Chang IY, Park CS, So I, Stanfield PR, Kim KW

PubMed Article URL:http://dx.doi.org/10.1053/j.gastro.2005.08.016

14-1172 was used in Immunohistochemistry to merge the two a priori conflicting theories on the origin of haematopoietic development into a single linear developmental process.

Mouse / Not Cited

Nature (Feb 2009; 457: 892)

"The haemangioblast generates haematopoietic cells through a haemogenic endothelial stage."

Author(s): Lanctin C, Sroczynska P, Stephenson C, Allen T, Kouskoff V, Lacaud G

PubMed Article URL:http://dx.doi.org/10.1038/nature07679

14-1172 was used in Immunohistochemistry-immunofluorescence to study ageing-associated differences between different organs and the exact time to start degenerating.

Mouse / 1:200

Aging (Dec 2018; 10: 3851)

"Aging-dependent decrease in the numbers of enteric neurons, interstitial cells of Cajal and expression of connexin43 in various regions of gastrointestinal tract."


PubMed Article URL:http://dx.doi.org/10.1016/j.aging.101677

14-1172 was used in Immunohistochemistry to suggest that ageing is associated with a reduction in the network volume of ICC in the terminal GI tract, which may influence the normal function of these regions.

Mouse / Not Cited

Journal of cellular and molecular medicine (Oct 2018; 22: 5160)

"Interstitial cell network volume is reduced in the terminal bowel of ageing mice."

Journal of cellular and molecular medicine (Oct 2018; 22: 5160)

14-1172 was used in Immunohistochemistry to investigate the role of signalling via THPO and its receptor, MPL, in the interaction of quiescent HSCs with their niche.

Species / Dilution

Summary

9 Immunocytochemistry References


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”); for 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 five years 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.

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Mouse / Not Cited

Journal of cellular and molecular medicine (Oct 2018; 22: 5160)

"Interstitial cell network volume is reduced in the terminal bowel of ageing mice."

Author(s): Gamage PPKM, Patel BA, Yeoman MS, Ranson RN, Saffrey MJ

PubMed Article URL:http://dx.doi.org/10.1111/jcmm.13794

9 Immunocytochemistry References

Species / Dilution

Summary

14-1172 was used in Immunocytochemistry to study whether bone marrow-derived cells can differentiate into Interstitial cells of Cajal and contribute to their regeneration using GFP-transgenic mice.

**Mouse / Not Cited**

Journal of biomechanics & biotechnology (Jul 2010; 10; )

"Bone marrow derivation of interstitial cells of cajal in small intestine following intestinal injury."


PubMed Article URL: http://dx.doi.org/10.1155/2010/164986

14-1172 was used in Immunofluorescence to test the hypothesis that mechanical dilation in obstruction disrupts the ICC network and that ICC do not mediate mechanotranscription of COX-2.

**Mouse / 1:20**

PloS one (Jun 2014; 8; )

"Are interstitial cells of Cajal involved in mechanical stress-induced gene expression and impairment of smooth muscle contractility in bowel obstruction?"

Author(s): Wu CC,Lin YM,Gao J,Winston JH,Cheng LK,Shi XZ

PubMed Article URL: http://dx.doi.org/10.1371/journal.pone.0076222

14-1172 was used in Immunofluorescence to suggest that sulphonylurea receptors (SUR) can modulate pacemaker [Ca2+]i oscillations via voltage-independent mechanism(s).

**Mouse / Not Cited**

Journal of cell science (Sep 2005; 118: 4163)

"Sulphonylurea receptors differently modulate ICC pacemaker Ca2+ activity and smooth muscle contractility."


PubMed Article URL: http://dx.doi.org/10.1242/jcs.02540

14-1172 was used in Immunocytochemistry to elucidate the origins of the calcium transients.

**Mouse / Not Cited**

American journal of physiology. Gastrointestinal and liver physiology (Nov 2011; 301: G835)

"On the origin of rhythm ic calcium transients in the ICC-MP of the mouse small intestine."

Author(s): Lowie BJ,Wang XY,White EJ,Huijinga JD

PubMed Article URL: http://dx.doi.org/10.1152/ajpgi.00077.2011

14-1172 was used in Immunocytochemistry to determine if secreted factors from M1 macrophages could injure mouse interstitial cells of Cajal in primary culture.

**Mouse / Not Cited**

Neuropsychopharmacology and motility : the official journal of the European Gastrointestinal Motility Society (Apr 2017; 29; )

"Tumor necrosis factor alpha driven by classically activated "M1" macrophages reduces interstitial cell of Cajal numbers."

Author(s): Eisenman ST,Gibbons SJ,Verhulst PJ,Cipriani G,Saur D,Farrugia G

PubMed Article URL: http://dx.doi.org/10.1111/nmo.12984

14-1172-85 was used in Immunocytochemistry, Flow Cytometry to report a PGC-related marker gene: C1EIP (Chromosome 1 Expression in PGCs), whose activation and expression are regulated by the transcription factor STAT3 (signal transducer and activator of transcription 3), histone acetylation, and promoter methylation. C1EIP regulates PGCs formation by mediating the expression of PGC-associated genes, such as CVH (Chicken Vasa Homologous) and CKIT (Chicken KIT proto-oncogene).

**Chicken / 1:100**

Frontiers in genetics (Sep 2020; 11; )

"C1EIP Functions as an Activator of ENO1 to Promote Chicken PGCs Formation via Inhibition of the Notch Signaling Pathway."

Author(s): Jin K,Li D,Jin J,Song J,Yang G,Chen G,Li B

PubMed Article URL: http://dx.doi.org/10.3389/fgene.2020.00751

14-1172 was used in Immunofluorescence to demonstrate a critical role for LOX in premetastatic niche formation.

**Mouse / Not Cited**

Cancer cell (Jan 2009; 15: 35)

"Hypoxia-induced lysyl oxidase is a critical mediator of bone marrow cell recruitment to form the premetastatic niche."

Author(s): Erler JT,Bennewith KL,Cox TR,Lang G,Bird D,Knogel A,Le QT,Giacca AJ

PubMed Article URL: http://dx.doi.org/10.1016/j.ccr.2008.11.012

14-1172 was used in Immunofluorescence to assess the variations of interstitial cells of Cajal (ICC) and explore the changes in mSCF/KIT-ETV1 signaling in the antrum and corpus of diabetic mice after treatment with EA.

**Mouse / 1:100**

Evidence-based complementary and alternative medicine : eCAM (Mar 2022; 2017; )

"Electroacupuncture at ST36 Protects ICC Networks via mSCF/KIT-ETV1 Signaling in the Stomach of Diabetic Mice."

Author(s): Tian L,Zhu B,Liu S

PubMed Article URL: http://dx.doi.org/10.1155/2017/3980870
14-1172-82 was used in Immunocytochemistry to examine whether 5-hydroxytryptamine plays a role in regulating the proliferation of interstitial cells of Cajal.

Mouse / Not Cited

Gastroenterology (Sep 2007; 133: 897)
"Exogenous serotonin regulates proliferation of interstitial cells of Cajal in mouse jejunum through 5-HT2B receptors."
Author(s):Wouters MM,Gibbons SJ, Roeder JL, Distad M, Ou Y, Strege PR, Szurszewski JH, Farrugia G
PubMed Article URL:http://dx.doi.org/10.1053/j.gastro.2007.06.017

21 Flow Cytometry References

Species / Dilution

Summary

14-1172 was used in Flow cytometry/Cell sorting to show that inactivation of the Mll5 gene in mice results in the reduction in frequency and function of haematopoietic stem cells.

Mouse / Not Cited

Blood (Feb 2009: 113: 1455)
"Mll5 contributes to hematopoietic stem cell fitness and homeostasis."
Author(s):Zhang Y,Wong J,Klinger M, Tran MT, Shannon KM, Killeen N
PubMed Article URL:http://dx.doi.org/10.1182/blood-2008-05-159505

14-1172 was used in Flow cytometry/Cell sorting to explore the ability of PLX3397 to deplete tumour-associated macrophages in gastrointestinal stromal tumor models.

Mouse / Not Cited

Clinical cancer research : an official journal of the American Association for Cancer Research (May 2014; 20: 2350)
"Increased KIT inhibition enhances therapeutic efficacy in gastrointestinal stromal tumor."
PubMed Article URL:http://dx.doi.org/10.1158/1078-0432.CCR-13-3033

14-1172 was used in Flow cytometry/Cell sorting to examine the capacity of single injections of adult muscle mononuclear cells to provide long-term benefit for muscular dystrophy in delta-sarcoglycan-null dystrophic immunocompetent mice.

Mouse / 1:50

The American journal of pathology (Sep 2008; 173: 792)
"Long-term survival of transplanted stem cells in immunocompetent mice with muscular dystrophy."
Author(s):Wallace GQ,Lapidos KA, Kenik JS, McNally EM
PubMed Article URL:http://dx.doi.org/10.2353/ajpath.2008.080259

14-1172 was used in Flow cytometry/Cell sorting to assess the role of the FGFR2 signalling pathway for SSC self-renewal.

Mouse / Not Cited

Development (Cambridge, England) (May 2012; 139: 1734)
"FGFR2 mediates mouse spermatogonial stem cell self-renewal via upregulation of Etv5 and Bcl6b through MAP2K1 activation."
Author(s):Ishii K,Kanatsu-Shinohara M,Toyokuni S,Shinohara T
PubMed Article URL:http://dx.doi.org/10.1242/dev.076539

14-1172 was used in Flow cytometry/Cell sorting to show for the first time that Sertoli cells are chemotactically for stem / progenitor spermatogonial, and that production of specific chemokines is regulated by ET5.

Mouse / Not Cited

Stem cells (Dayton, Ohio) (Oct 2010; 28: 1882)
"ETV5 regulates sertoli cell chemokines involved in mouse stem/progenitor spermatogonia maintenance."
Author(s):Simon L,Ekman GO,Garcia T,Carnes K,Zhang Z,Murphy T,Murphy KM,Hess RA,Cooke PS,Hofmann MC
PubMed Article URL:http://dx.doi.org/10.1002/stem.508

14-1172 was used in Flow cytometry/Cell sorting to investigate how prior exposure to cytotoxic therapy influences leukemogenesis and TP53 mutations in t-AML/t-MDS patients.

Mouse / Not Cited

The Journal of experimental medicine (Apr 2014; 211: 635)
"The transcription factor E4bp4/Nfil3 controls commitment to the NK lineage and directly regulates Eomes and Id2 expression."
Author(s):Male V, Nisoli I, Kostrzewski T, Allan DS, Carlyle JR, Lord GM, Wack A, Brady HJ
PubMed Article URL:http://dx.doi.org/10.1083/jem.20132398

"14-1172 was used in Flow cytometry/Cell sorting to investigate the role of COP1 in tumourigenesis."

**Blood** (Sep 2013; 122: 1750)
"COP1 targets C/EBPδ for degradation and induces acute myeloid leukemia via Trib1."
Author(s): Yoshida A,Kato JY,Nakamae I,Yoneda-Kato N
PubMed Article URL:http://dx.doi.org/10.1182/blood-2012-12-476101

14-1172 was used in Flow cytometry/Cell sorting to determine the mechanism by which interleukin-7 in early B lymphopoiesis and the role of Stat5-dependent and independent pathways in this process.

**Science advances** (Jan 2018; 4: )
"Discrete roles and bifurcation of PTEN signaling and mTORC1-mediated anabolic metabolism underlie IL-7-driven B lymphopoiesis."
PubMed Article URL:http://dx.doi.org/10.1126/sciadv.aar5701

14117282 was used in flow cytometry to use knockout mice to determine if GRK6 contributes to hematopoiesis

**Cell death & disease** (Nov 2016; 7: )
"GRK6 regulates ROS response and maintains hematopoietic stem cell self-renewal."
Author(s): Lee Q,Yao W,Chen Y,Yan B,Liu C,Yuan M,Zhou Y, Ma L
PubMed Article URL:http://dx.doi.org/10.1038/cddis.2016.377

14-1172 was used in Flow cytometry/Cell sorting to investigate the expression of toll-like receptors on different hematopoietic stem cells and the mechanism by which they stimulate innate immune system replenishment.

**Immunity** (Jun 2006; 24: 801)
"Toll-like receptors on hematopoietic progenitor cells stimulate innate immune system replenishment."
PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2006.04.008

14-1172 was used in Flow cytometry/Cell sorting to suggest that a physiological thymic microenvironment does not optimally support T cell differentiation from triple negative precursors.

**PloS one** (Jun 2012; 7: )
"Extra-thymic physiological T lineage progenitor activity is exclusively confined to cells expressing either CD127, CD90, or high levels of CD117."
Author(s): Saran N, Pommerencke J, Witzlau K, Regelin M, Krueger A
PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0030864

14-1172 was used in Flow cytometry/Cell sorting to investigate the underlying mechanisms leading to high metabolic rate in myeloproliferative disorders, showing that HDL and Glut1 inhibition reverse hypermetabolic state.

**The Journal of experimental medicine** (Feb 2013; 210: 339)
"HDL and Glut1 inhibition reverse a hypermetabolic state in mouse models of myeloproliferative disorders."
Author(s): Gautier EL, Westerterp M, Bhagwat N, Cremers S, Shih A, Abdel-Wahab O, Lutjohann D, Randolph GJ, Levine RL, Tall AR, Yvan-Charvet L
PubMed Article URL:http://dx.doi.org/10.1084/jem.20121357

14-1172 was used in Flow cytometry/Cell sorting to investigate that antiviral immune responses may induce sustained alterations in natural killer cell populations.

**Journal of immunology** (Baltimore, Md. : 1950) (Mar 2011; 186: 2918)
"Genetic labeling reveals altered turnover and stability of innate lymphocytes in latent mouse cytomegalovirus infection."
Author(s): Busche A, Schmitz S, Fleige H, Robbins SH, Walzer T, Stewart CA, Förster R, Messerle M, Prinz I
PubMed Article URL:http://dx.doi.org/10.4049/jimmunol.1003232

14-1172 was used in Flow cytometry/Cell sorting to determine the sex of collected chicken (Gallus gallus) pluripotent embryonic stem cells (ESCs) and primordial germ cells (PGCs) by identifying specific sex markers via polymerase chain reaction (PCR) and fluorescence activated cell sorter (FACS)."
Mouse / Not Cited

14-1172 was used in Flow cytometry/Cell sorting to investigate the mechanism by which perivascular mast cells acquire IgE from the blood.

Immunity (Jan 2013; 38: 166)
"Perivascular mast cells dynamically probe cutaneous blood vessels to capture immunoglobulin E."
Author(s): Cheng LE, Hartmann K, Roers A, Krummel MF, Locksley RM
PubMed Article URL: http://dx.doi.org/10.1016/j.immuni.2012.09.022

Mouse / Not Cited

14-1172 was used in Flow cytometry/Cell sorting to show that malignant melanoma has the ability to undergo phenotypic change by a cell-intrinsic/autonomous mechanism that can be characterised by Met expression.

Oncotarget (Oct 2016; 7: 70779)
"Different growth and metastatic phenotypes associated with a cell-intrinsic change of Met in metastatic melanoma."
Author(s): Adachi E, Sakai K, Nishiuchi T, Imamura R, Sato H, Matsumoto K
PubMed Article URL: http://dx.doi.org/10.18632/oncotarget.12221

Mouse / Not Cited

14117282 was used in flow cytometry to find a role for Car enzymes in regulating mast cell lineage commitment

"Carbonic anhydrase enzymes regulate mast cell-mediated inflammation."
Author(s): Henry EK, Sy CB, Inclan-Rico JM, Espinosa V, Ghanny SS, Dwyer DF, Soteropoulos P, Rivera A, Siracusa MC
PubMed Article URL: http://dx.doi.org/10.1084/jem.20151739

Mouse / Not Cited

14-1172 was used in Flow cytometry/Cell sorting to investigate the interaction between leukaemia-initiating cells and normal hematopoietic cells at the early phase of chronic myeloid leukaemia, showing MIP-1/CCL3-mediated maintenance of initiating cells.

The Journal of experimental medicine (Nov 2013; 210: 2661)
"MIP-1/CCL3-mediated maintenance of leukemia-initiating cells in the initiation process of chronic myeloid leukemia."
Author(s): Baba T, Naka K, Morishita S, Komatsu N, Hirao A, Mukaida N
PubMed Article URL: http://dx.doi.org/10.1084/jem.20130112

Chicken / 1:100

Frontiers in genetics (Sep 2020; 11:)
"C1EIP Functions as an Activator of ENO1 to Promote Chicken PGCs Formation via Inhibition of the Notch Signaling Pathway."
Author(s): Jin K, Li D, Jin J, Song J, Zhang Y, Chang G, Chen G, Li B
PubMed Article URL: http://dx.doi.org/10.3389/fgene.2020.00751

Chicken / 1:100

Nature communications (May 2021; 12:)
"Production of viable chicken by allogeneic transplantation of primordial germ cells induced from somatic cells."
PubMed Article URL: http://dx.doi.org/10.1038/s41467-021-23242-5

2 Western Blot References

Species / Dilution

Summary

Food science & nutrition (Jun 2019; 7: 2068)
"Effects of <i>Lactobacillus plantarum</i> CQPC01-fermented soybean milk on activated carbon-induced constipation through its antioxidant activity in mice."
PubMed Article URL: http://dx.doi.org/10.1002/fsn3.1048

Mouse / 1:1000

14-1172-82 was used in Western Blot to show LP-CQPC01 could be used as a new starter to produce high-quality soybean milk, which might be used as a functional drink.

PubMed Article URL:http://dx.doi.org/10.1002/fsn3.1048

14-1172-82 was used in Western Blot to compare the prevention effects of Shuidouchi with different fermentation times on constipation in mice.

**Preventive Effects of Different Fermentation Times of Shuidouchi on Diphenoxylate-Induced Constipation in Mice.**


PubMed Article URL: http://dx.doi.org/10.3390/foods8030086

### 2 Functional Assay References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mouse / 1:1000</strong></td>
<td>14-1172-82 was used in Functional assay to characterize the role of CK1 (encoded by Csnk1a1) in skin physiology.</td>
</tr>
<tr>
<td><strong>Mouse / Not Cited</strong></td>
<td>14-1172 was used in Functional assays to demonstrate that HSCs exhibiting enhanced self-renewal potential can be isolated based on c-Kit expression during both steady state and stress haematopoiesis.</td>
</tr>
<tr>
<td><strong>Mouse / Not Cited</strong></td>
<td>The Journal of experimental medicine (Feb 2014; 211: 217) &quot;High c-Kit expression identifies hematopoietic stem cells with impaired self-renewal and megakaryocytic bias.&quot; Author(s): Shin JY, Hu W, Naramura M, Park CY</td>
</tr>
</tbody>
</table>

### 1 Neutralization References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mouse / Not Cited</strong></td>
<td>14-1172 was used in Neutralization experiments to demonstrate that potentiation of the immune response by imatinib may facilitate clearance of diverse microbial pathogens.</td>
</tr>
</tbody>
</table>

### 1 Inhibition Assays References

<table>
<thead>
<tr>
<th>Species / Dilution</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mouse / Not Cited</strong></td>
<td>14-1172 was used in Blocking experiments to demonstrate that 4-vinylcyclohexene diepoxide induces ovotoxicity by direct inhibition of KIT autophosphorylation of the oocyte.</td>
</tr>
<tr>
<td><strong>Rat / 1:625</strong></td>
<td>Biology of reproduction (Oct 2011; 85: 755) &quot;Inhibition of ovarian KIT phosphorylation by the ovotoxicant 4-vinylcyclohexene diepoxide in rats.&quot; Author(s): Mark-Kappeler CJ, Sen N, Lukefahr A, McKee L, Sipes IG, Konhilas J, Hoyer PB</td>
</tr>
</tbody>
</table>