

CD40 Monoclonal Antibody (HM40-3), eBioscience™

Product Details

Size	50 µg
Species Reactivity	Mouse, Rat
Published Species	Rat, Mouse, Human
Host/Isotype	Armenian hamster / IgM, kappa
Class	Monoclonal
Type	Antibody
Clone	HM40-3
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_467227

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	Assay-Dependent	3 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Flow Cytometry (Flow)	1 µg/test	15 Publications
Functional Assay (FN)	Assay-Dependent	9 Publications
In vitro Assay (IV)	-	5 Publications
Miscellaneous PubMed (Misc)	-	2 Publications

Product Specific Information

Description: The HM40-3 monoclonal antibody reacts with mouse and rat CD40, a 45-50 kDa type I transmembrane glycoprotein. CD40 is a member of the TNFR family and is expressed by mouse B lymphocytes, follicular dendritic cells, thymic epithelium, and a subset of peripheral T cells. CD40 regulates B cell development/maturation by inducing Ig isotype switching and in combination with other signals such as IL-4, protects B cells from surface Ig-induced apoptosis and promotes proliferation. Interaction of CD40 with CD154 (gp39), its ligand on T cells, is important in T-B cell crosstalk and plays a role in costimulation and immune regulation.

Applications Reported: The HM40-3 antibody has been reported for use in flow cytometric analysis, and immunohistochemical staining. HM40-3 has also been reported in inhibition of binding of soluble CD154 to CD40 and in vitro activation of B cells. (Please use Functional Grade purified HM40-3, Product # 16-0402, in functional assays.).

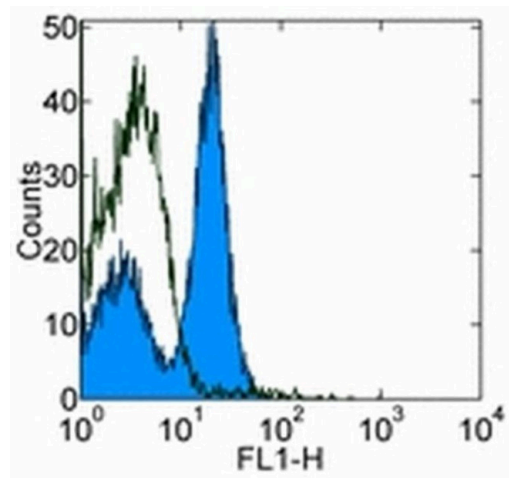
Applications Tested: The HM40-3 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD40 Monoclonal Antibody (HM40-3), eBioscience™



CD40 Antibody (14-0402-81) in Flow
Staining of BALB/c splenocytes with 0.5 µg Armenian Hamster IgG Isotype Control Purified (Product # 14-4888-81) (open histogram) or 0.5 µg Anti-Mouse /Rat CD40 Purified (filled histogram) followed by Anti-Armenian Hamster IgG FITC (Product # 11-4111). Total viable cells were used for analysis.

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Immunohistochemistry (3)

<p>Journal of Alzheimer's disease : JAD</p> <p>Microglia Demonstrate Local Mixed Inflammation and a Defined Morphological Shift in an APP/PS1 Mouse Model.</p> <p>"14-0402 was used in Immunohistochemistry to indicate that pro- and anti-inflammatory factors of microglia occur in APP/PS1 mice."</p> <p>Authors: Holloway OG,King AE,Ziebell JM</p>	<p>Year 2021</p> <p>Species Mouse</p> <p>Dilution 1:1000</p>
<p>PloS one</p> <p>Intrapancreatic injection of human bone marrow-derived mesenchymal stem/stromal cells alleviates hyperglycemia and modulates the macrophage state in streptozotocin-induced type 1 diabetic mice.</p> <p>"14-0402 was used in Immunohistochemistry to evaluate the effects of intrapancreatic and intravenous injection of human BMMSCs in streptozotocin-induced type-1 diabetic mouse model."</p> <p>Authors: Murai N,Ohtaki H,Watanabe J,Xu Z,Sasaki S,Yagura K,Shioda S,Nagasaka S,Honda K,Izumizaki M</p>	<p>Year 2017</p> <p>Species Mouse</p> <p>Dilution 1:2000</p>

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Immunohistochemistry (Frozen) (1)

<p>Cancer cell</p> <p>Synergy between PI3K signaling and MYC in Burkitt lymphomagenesis.</p> <p>"14-0402 was used in Immunohistochemistry on frozen tissues to find recurrent PI3K pathway activation in human Burkitt lymphoma indicates that deregulated c-MYC and PI3K activity cooperate in Burkitt lymphoma pathogenesis."</p> <p>Authors: Sander S,Calado DP,Srinivasan L,Köchert K,Zhang B,Rosolowski M,Rodig SJ,Holzmann K,Stilgenbauer S,Siebert R,Bullinger L,Rajewsky K</p>	<p>Year 2012</p> <p>Species Mouse</p>
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Flow Cytometry (15)

<p>Veterinary research</p> <p>Curcumin-dependent phenotypic transformation of microglia mediates resistance to pseudorabies-induced encephalitis.</p> <p>"Published figure using CD40 monoclonal antibody (Product # 14-0402-82) in Flow Cytometry"</p> <p>Authors: Feng L,Luo G,Li Y,Zhang C,Liu Y,Liu Y,Chen H,He D,Zhu Y,Gan L</p>	<p>Year 2023</p>
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More applications with references on thermofisher.com

- FN (9)
- IV (5)
- Misc (2)

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