Antibodies

**Anti-Mouse CD48 (SLAMF2)
Antibody, Clone HM48-1, APC**

Hamster (Armenian) monoclonal IgG1
antibody against mouse CD48
(SLAMF2), APC-conjugated

Catalog #60162AZ   100 µg   0.2 mg/mL
        #60162AZ.1   25 µg   0.2 mg/mL

Product Description

The HM48-1 antibody reacts with mouse CD48, a 45 kDa GPI-anchored glycoprotein and a member of the signaling lymphocyte activation molecule (SLAM) family and Ig superfamily. SLAM family members play a role in multiple aspects of immune function including costimulation, cytotoxicity, and cytokine production. CD48 also plays a role in cell adhesion and T cell activation. In mice, CD48 is thought to be present on nearly all hematopoietic cells except neutrophils and ESLAM cells (CD45+EPCR+CD48-CD150+ hematopoietic stem cells with long-term self-renewal capacity). Ligands for CD48 include CD2 and CD244, binding of which helps to promote interactions between immune cells. HM48-1 is reported to be capable of blocking CD48:CD2 and CD48:CD244 interactions in vitro and in vivo. HM48-1 is also reported to inhibit the proliferative response of spleen cells to mitogens, inhibit CTL activity, and enhance the survival of cardiac allografts.

|	
Target Antigen Name:	CD48 (SLAMF2)
Alternative Names:	B-cell membrane protein, BCM1, Blast, Blast-1, HM48, MEM-102, OX-45 (rat), Sgp-60
Gene ID:	12506
Species Reactivity:	Mouse
Host Species:	Hamster (Armenian)
Clonality:	Monoclonal
Clone:	HM48-1
Isotype:	IgG1, lambda3
Immunogen:	Mouse T lymphoma MBL-2
Conjugate:	APC

Applications

Verified:	FC
Reported:	FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 0.25 µg per 1 x 10^6 cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application.

Data
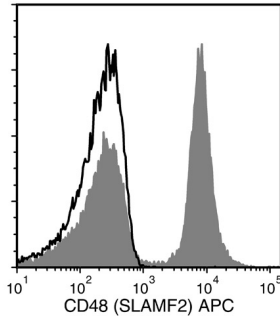
Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD48 (SLAMF2) Antibody, Clone HM48-1, APC (filled histogram) or an Armenian hamster IgG isotype control antibody, APC (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Fontinha D et al. (2015) Murid gammaherpesvirus latency-associated protein M2 promotes the formation of conjugates between transformed B lymphoma cells and T helper cells. PLoS One 10(11): 1–18. (FC)
2. Schulte R et al. (2015) Index sorting resolves heterogeneous murine hematopoietic stem cell populations. Exp Hematol 43(9): 803–11. (FC)
3. Soni C et al. (2015) Distinct and synergistic roles of FcγRIIB deficiency and 129 strain-derived SLAM family proteins in the development of spontaneous germinal centers and autoimmunity. J Autoimmun 63: 31–46. (FC)
4. Santos PM et al. (2014) Cell-intrinsic in vivo requirement for the E47-p21 pathway in long-term hematopoietic stem cells. J Immunol 192(1): 160–8. (FC)
5. Benz C et al. (2012) Hematopoietic stem cell subtypes expand differentially during development and display distinct lymphopoietic programs. Cell Stem Cell 10(3): S1-S14. (FC)
6. Glotzbach JP et al. (2011) An information theoretic, microfluidic-based single cell analysis permits identification of subpopulations among putatively homogeneous stem cells. PLoS One 6(6): e21211. (FC)
7. Hazen AL et al. (2009) SHIP is required for a functional hematopoietic stem cell niche. Blood 113(13): 2924–33. (FC)
8. Kent DG et al. (2009) Prospective isolation and molecular characterization of hematopoietic stem cells with durable self-renewal potential. Blood 113(25): 6342–50.