

SM1602A**Monoclonal Antibody to CD147 - Azide Free**

Alternate names:	5F7, BSG, Basigin, Collagenase stimulatory factor, EMMPRIN, Extracellular matrix metalloproteinase inducer, Leukocyte activation antigen M6, OK blood group antigen, TCSF, Tumor cell-derived collagenase stimulatory factor
Quantity:	1 mg
Concentration:	1.0 mg/ml
Background:	CD147 is a 50-60kD glycoprotein also known as neurothelin and basigin. CD147 is broadly expressed on peripheral blood cells and by endothelial cells. Expression upon T cells is increased following activation.
Uniprot ID:	P35613
NCBI:	NP_001719.2
GeneID:	682
Host / Isotype:	Mouse / IgG1
Clone:	MEM-M6/1
Immunogen:	CD147Rg, consisting of the cDNA coding for the hinge region, CH2 and CH3 domains of Human IgG1.
Format:	State: Liquid purified IgG fraction Purification: Affinity Chromatography on Protein A Buffer System: PBS, pH 7.4 without preservatives Stabilizers: None
Applications:	Immunoprecipitation. Western Blot (<i>Non-Reducing Conditions</i>). Flow Cytometry: Use 10 µl of 1/10-1/50 diluted CD147 antibody to label 10 ⁶ cells or 100 µl whole blood. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes the Human CD147 cell surface antigen, a 50-60kD glycoprotein also known as neurothelin and basigin.
Species Reactivity:	Tested: Human.
Storage:	Store the antibody undiluted at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Koch C, Staffler G, Hüttinger R, Hilgert I, Prager E, Cerný J, et al. T cell activation-associated epitopes of CD147 in regulation of the T cell response, and their definition by antibody affinity and antigen density. <i>Int Immunol.</i> 1999 May;11(5):777-86. PubMed PMID: 10330283. 2. Yang Y, Lu N, Zhou J, Chen ZN, Zhu P. Cyclophilin A up-regulates MMP-9 expression and adhesion of monocytes/macrophages via CD147 signalling pathway in rheumatoid arthritis. <i>Rheumatology (Oxford).</i> 2008 Sep;47(9):1299-310. doi:

- 10.1093/rheumatology/ken225. Epub 2008 Jun 21. PubMed PMID: 18567920.
3. Schneiderhan W, Diaz F, Fundel M, Zhou S, Siech M, Hasel C, et al. Pancreatic stellate cells are an important source of MMP-2 in human pancreatic cancer and accelerate tumor progression in a murine xenograft model and CAM assay. *J Cell Sci.* 2007 Feb 1;120(Pt 3):512-9. Epub 2007 Jan 16. PubMed PMID: 17227797.
4. Chen Y, Zhang H, Gou X, Horikawa Y, Xing J, Chen Z. Upregulation of HAb18G/CD147 in activated human umbilical vein endothelial cells enhances the angiogenesis. *Cancer Lett.* 2009 Jun 8;278(1):113-21. doi: 10.1016/j.canlet.2009.01.004. Epub 2009 Feb 14. PubMed PMID: 19223118.
5. Schneiderhan W, Scheler M, Holzmann KH, Marx M, Gschwend JE, Bucholz M, et al. CD147 silencing inhibits lactate transport and reduces malignant potential of pancreatic cancer cells in in vivo and in vitro models. *Gut.* 2009 Oct;58(10):1391-8. doi: 10.1136/gut.2009.181412. Epub 2009 Jun 7. PubMed PMID: 19505879.
6. Hu J, Dang N, Yao H, Li Y, Zhang H, Yang X, et al. Involvement of HAb18G/CD147 in T cell activation and immunological synapse formation. *J Cell Mol Med.* 2010 Aug;14(8):2132-43. doi: 10.1111/j.1582-4934.2010.01012.x. Epub 2010 Jul 15. PubMed PMID: 20082657.