

Anti-human CD63 (E-H9) VHH



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Properties

Product type:	VHH
Catalog number:	C-002
Clone number:	E-H9
Immunogen:	Purified extracellular domain of human CD63
Reacts with:	Human CD63
Tested applications:	ELISA, Flow cytometry
Source:	Recombinant monoclonal VHH (<i>Llama glama</i>), purified from HEK293-E 253 cells using affinity chromatography
Clonality:	Monoclonal
Purity:	Rmp-Protein A purification and Ion Exchange Chromatography, >98%
Storage buffer:	PBS
Form:	Liquid
Concentration:	2.2 mg/ml
Storage:	Store at -80°C

Products

Cat. No.	Target	Clone	Form	Applications	Size
C-002	Human CD63	E-H9	Purified	ELISA, FC	250 µg

Description

CD63 (melanoma-associated antigen, ME491) is a tetraspanin and a member of the transmembrane 4 superfamily. It is a cell surface-associated protein characterized by four transmembrane domains. As a tetraspanin, CD63 forms networks with a variety of proteins, called tetraspanin-enriched microdomains (TEMs). It is localized in different membranes of the cell, including the cell membrane and membranes of lysosomes and granules, including the platelet dense granules and the Weibel-Palade bodies of endothelial cells. The complex localization pattern suggests a tightly regulated trafficking and distribution process.¹

CD63 is often used as a platelet activation marker, as cell surface expression increases due to platelet granule secretion after platelet activation.^{2,3}

Deficiency of CD63 is associated with Hermansky-Pudlak syndrome, an autosomal recessive inherited disorder that is characterized by the absence of dense granules, oculocutaneous albinism and a bleeding tendency.^{4,5}

Use, storage and stability

Anti-human CD63 (E-H9) VHH is suitable for use in ELISA and flow cytometry studies.

The sequence of clone E-H9 differs from the anti-human CD63 VHH, clone E-B8 (Cat No. C-001).

After thawing, E-H9 should be stored in appropriate small aliquots at -20°C or -80°C (stable for at least 6 months) or at 4°C for short time storage.

References

1. Pols MS, Klumperman J. Trafficking and function of the tetraspanin CD63. *Exp Cell Res*. 2009; 315: 1584-1592. doi: 10.1016/j.yexcr.2008.09.020.
2. Brisson AR, Tan S, Linares R, Gounou C, Arraud N. Extracellular vesicles from activated platelets: a semiquantitative cryo-electron microscopy and immuno-gold labeling study. *Platelets*. 2017; 28: 263-271. doi: 10.1080/09537104.2016.1268255.
3. Escolar G, White JG. Changes in glycoprotein expression after platelet activation: differences between in vitro and in vivo studies. *Thromb Haemost*. 2000; 83: 371-386.
4. Walker M, Payne J, Vora A. Hermansky-Pudlak syndrome. *Br J Haematol*. 2007; 138: 671. doi: 10.1111/j.1365-2141.2007.06713.x
5. Nishibori M, Cham B, McNicol A, Shalev A, Jain N, Gerrard JM. The protein CD63 is in platelet dense granules, is deficient in patients with Hermansky-Pudlak syndrome, and appears identical to granulophysin. *J Clin Invest*. 1993; 91: 1775-1782. doi: 10.1172/JCI116388

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