Human CD99-L2 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF5185

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD99-L2 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human CD99-L2 Val20-Ala188 Accession # Q8TCZ2
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

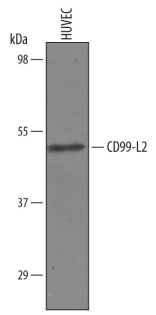
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA

Western Blot



Detection of Human CD99-L2 by Western Blot. Western blot shows lysates of HUVEC human umbilical vein endothelial cells. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human CD99-L2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5185) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for CD99-L2 at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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BACKGROUND

CD99 antigen-like 2 (CD99-L2) is a 45 kDa type I transmembrane glycoprotein in the CD99 family of molecules (1-3). The major form of human CD99-L2 cDNA encodes a 262 amino acid (aa) precursor with a 25 aa predicted signal sequence, a 160 aa extracellular domain (ECD), a 21 aa transmembrane (TM) segment, and a 56 aa cytoplasmic region (4). This form is called the long form, or isoform E3'-E4'-E3-E4. Other isoforms include the muscle E3-E4, missing aa 45-93, and E4, a short form missing aa 45-116 (1, 4). E3-E4 and E3'-E3-E4 forms are the major isoforms in mouse and rat, respectively (1). Human forms that diverge at Pro 45 (145 aa precursor) or Met 180 (173 aa precursor) have been sequenced, and would be predicted to lack a TM segment (4, 5). None of the forms contain predicted N-linked glycosylation sites within the ECD, but O-linked glycosylation is likely (1, 2). The ECD of the human CD99-L2 isoform E3-E4 shares 85%, 75% and 70% aa identity with the corresponding forms of mouse, rat, and bovine CD99-L2, respectively. The human CD99 and CD99-L2 ECDs share only about 35% aa identity, but both contain three conserved acidic motifs and are thought to originate from the same ancestral gene (1, 2). The nearly ubiquitous expression of CD99-L2 is similar to that of CD99. Human CD99-L2 cDNA is detected in most organs, but not in thymus (1). In the mouse, protein is detectable in lung, thymocytes, mouse leukocytes and vascular endothelial cells (1, 3, 6). The endothelial cell CD99-L2 is reported to mediate cell aggregation and neutrophil or monocyte, but not lymphocyte, extravasation to inflamed tissue *in vivo* (3, 6).

References:

1. Suh, Y.H. *et al.* (2003) Gene **307**:63.
2. Park, S.H. *et al.* (2005) Gene **353**:177.
3. Schenkel, A.R. *et al.* (2007) Cell Commun. Adhes. **14**:227.
4. Swissprot Accession # Q8TCZ2.
5. Entrez Accession # EAW99391.
6. Bixel, G. *et al.* (2007) Blood **109**:5327.

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