

DESCRIPTION

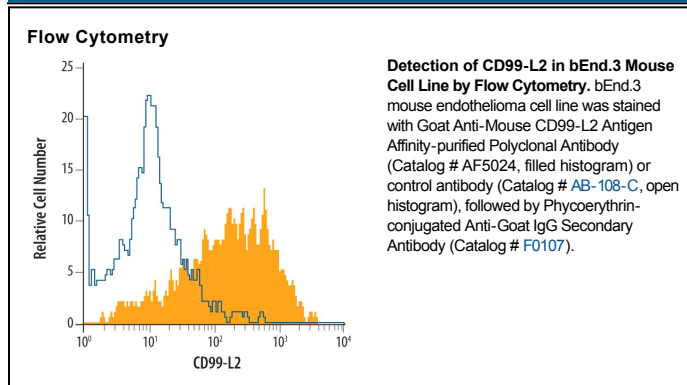
Species Reactivity	Mouse
Specificity	Detects mouse CD99-L2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant human CD99-L2 is observed and less than 5% cross-reactivity with recombinant mouse CD99 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD99-L2 Val20-Ala141 Accession # NP_612182
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 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	0.1 µg/mL	Recombinant Mouse CD99-L2 Fc Chimera (Catalog # 5024-CD)
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



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. <ul style="list-style-type: none"> ● 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.

BACKGROUND

CD99 antigen-like 2 (CD99-L2) is a 45 kDa type I transmembrane glycoprotein in the CD99 family of molecules (1 - 3). Mouse CD99-L2 cDNA encodes a 214 amino acid (aa) precursor with a 23 aa predicted signal sequence, a 116 aa extracellular domain (ECD), a 21 aa transmembrane segment, and a 54 aa cytoplasmic region (4). The ECD contains no N-linked glycosylation sites, but O-linked glycosylation is likely (1, 2). A long isoform with a 23 aa insert after aa 43 within the ECD is expressed in human, and probably in mouse (2, 5). Both long and short isoforms may have minor variants missing portions of the N-terminus of the mature protein (6). The ECD of mouse CD99-L2 short isoform shares 85%, 72% and 66% aa identity with rat, human, and bovine CD99-L2, respectively (3, 5). The mouse CD99 and CD99-L2 ECDs share only 31% 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. Mouse CD99-L2 shows highest *in situ* hybridization signals in neurons, cortical thymocytes, ganglia, ovarian granulosa cells, testis, and kidney, and detectable protein levels in lung, thymocytes, mouse leukocytes and vascular endothelial cells (2, 7). CD99-L2 expression on endothelial cells is reported to mediate cell aggregation and neutrophil or monocyte extravasation to inflamed tissue *in vivo*, while CD99 mediates lymphocyte extravasation as well (3, 7).

References:

1. Park, S.H. *et al.* (2005) *Gene* **353**:177.
2. Suh, Y.H. *et al.* (2003) *Gene* **307**:63.
3. Schenkel, A.R. *et al.* (2007) *Cell Commun. Adhes.* **14**:227.
4. Entrez Accession # AAH31736.
5. Entrez Accession # EDL26579.
6. Entrez Accession # EDL26580 and CAM25451.
7. Bixel, G. *et al.* (2007) *Blood* **109**:5327.