

DESCRIPTION

Species Reactivity	Feline
Specificity	Detects feline Fas/TNFRSF6/CD95 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Fas, recombinant mouse Fas, or recombinant rat Fas is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 431006
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant feline Fas/TNFRSF6/CD95 Ala25-Lys172 Accession # NP_001009314
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	Recombinant Feline Fas/TNFRSF6/CD95 Fc Chimera (Catalog # 2267-FA)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

Feline Fas (fibroblast associated; also named CD95 and APO-1) is a 45 kDa type I transmembrane (TM) glycoprotein that is a member of the TNF receptor superfamily, designated TNFRSF6 (1-3). The family contains about 30 members, and is characterized by the presence of at least one cysteine-rich domain that contains multiple intrachain disulfide bonds. In general, the superfamily is divided into cytoplasmic death domain (DD) containing, and non-DD containing receptors (3). Feline Fas is synthesized as a 314 amino acid (aa) precursor that contains a 24 aa signal sequence, a 148 aa extracellular region, a 16 aa TM segment, and a 126 aa cytoplasmic tail (4). The extracellular region contains four potential N-linked glycosylation sites plus two distinct cysteine-rich domains of approximately 40 aa each; the cytoplasmic tail shows a 45 aa DD. The extracellular region of feline Fas shares 68%, 65%, 53%, and 58% aa sequence identity to porcine, human, mouse, and rat Fas, respectively. There are five alternate splice forms of feline Fas, which vary from 132 aa to 209 aa in length. All use exons 1-3 (aa 1-111) and all are missing the transmembrane segment of the full length form (5). Circulating Fas is reported to be both a dimer and trimer at low ng/mL concentrations. The ligand for Fas is FasL, and Fas ligation activates both the MEK cascade and FADD/caspase-8 pathway (7).

References:

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3. Collette, Y. *et al.* (2003) *Trends Immunol.* **24**:387.
4. Mizuno, T. *et al.* (1998) *Vet. Immunol. Immunopathol.* **65**:161.
5. Mizuno, T. *et al.* (2004) *Eur. J. Immunogenet.* **31**:159.
6. Knipping, E. *et al.* (1995) *Blood* **85**:1562.
7. Baker, S.J. and E.P. Reddy (1998) *Oncogene* **17**:3261.