

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 are observed
Source	Monoclonal Mouse IgG ₁ Clone # 431014
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
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	0.25-1 µg/10 ⁶ cells	Feline peripheral blood mononuclear cells treated with PMA and Ca ²⁺ ionomycin

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

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 (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 utilize 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:

- Locksley, R.M. *et al.* (2001) *Cell* **104**:487.
- Gaur, U. and B.B. Aggarwal (2003) *Biochem. Pharmacol.* **66**:1403.
- Collette, Y. *et al.* (2003) *Trends Immunol.* **24**:387.
- Mizuno, T. *et al.* (1998) *Vet. Immunol. Immunopathol.* **65**:161.
- Mizuno, T. *et al.* (2004) *Eur. J. Immunogenet.* **31**:159.
- Knipping, E. *et al.* (1995) *Blood* **85**:1562.
- Baker, S.J. and E.P. Reddy (1998) *Oncogene* **17**:3261.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.