

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Fas/TNFRSF6/CD95 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 50825
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Fas/TNFRSF6/CD95 Gln26-Asn173 Accession # P25445
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *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	HEK293 Human Cell Line Transfected with Human Fas/TNFRSF6/CD95 and eGFP

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

Fas, also known as APO-1, CD95, and TNFRSF6, was originally identified as a cell-surface protein which binds to monoclonal antibodies that were cytolytic for various human cell lines. In the new TNF Receptor superfamily nomenclature, Fas is referred to as TNFRSF6. Human Fas cDNA encodes a 325 amino acid (aa) residue type 1 membrane protein that belongs to the TNF and NGF receptor family. Alternatively spliced cDNAs encoding multiple Fas isoforms, including a soluble form of Fas lacking the transmembrane domain, have also been identified. Fas is highly expressed in epithelial cells, hepatocytes, activated mature lymphocytes, virus-transformed lymphocytes, and other tumor cells. Fas expression has also been detected in mouse thymus, liver, heart, lung, kidney and ovary. The ligand for Fas (FasL) has been identified and shown to be a member of the TNF family of type 2 membrane proteins. FasL is predominantly expressed by activated T-lymphocytes, NK cells, and in tissues with immune-privileged sites. Soluble FasL can be produced by proteolysis of membrane-associated Fas.

Ligation of Fas by FasL or anti-Fas antibody has been shown to induce apoptotic cell death in Fas-bearing cells. Fas plays a role in the down-regulation of the immune reaction and has been shown to be a key mediator of activation-induced death of activated T-lymphocytes. Fas-mediated cell death has also been shown to be important for the deletion of activated or autoreactive B-lymphocytes. Besides the perforin/granzyme-based mechanism, the Fas system has been identified as the alternate pathway for CTL-mediated cytotoxicity. FasL has also been shown to function in immunological privileged sites by killing infiltrating Fas-bearing lymphocytes and inflammatory cells.

References:

1. Nagata, S. and P. Golstein (1995) *Science* **267**:1449.
2. Nagata, S. (1997) *Cell* **88**:355.
3. Parijs, L. and A.K. Abbas (1996) *Current Opinion in Immunol.* **8**:355.
4. Green, D.R. and C.F. Ware (1997) *Proc. Natl. Acad. Sci. USA* **94**:5986.

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.