

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 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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.

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