

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Fas in direct ELISAs and Western blots. In direct ELISAs and Western blots, this antibody does not cross-react with recombinant human (rh) TNF RI, rhTNF RII, rmTNF RI, or rmTNF RII.
Source	Monoclonal Mouse IgG ₁ Clone # 50830
Purification	Protein A or G purified from ascites
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Fas Gln26-Asn173 Accession # P25445
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.

Human Fas/TNFRSF6/CD95 Sandwich Immunoassay	Reagent
ELISA Capture	2-8 µg/mL
ELISA Detection	0.1-0.4 µg/mL
Standard	Human Fas/TNFRSF6/CD95 Antibody (Catalog # MAB144) Human Fas/TNFRSF6/CD95 Biotinylated Antibody (Catalog # BAF326) Recombinant Human Fas/TNFRSF6/CD95 Fc Chimera (Catalog # 326-FS)

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

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.