

DESCRIPTION

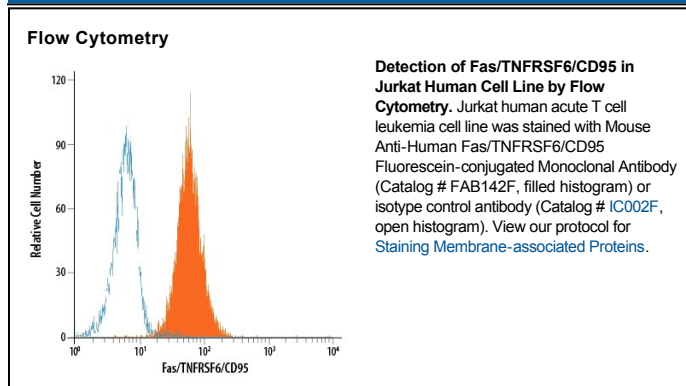
Species Reactivity	Human
Specificity	Detects human Fas in direct ELISAs and Western blots. Does not cross-react with rhCD27, rmCD27, rhCD30, rmCD30, rhCD40, rmCD40, rhDR3, rmdr3, rhHVEM, rmHVEM, rhLymphotoxin βR, rmLymphotoxin βR, rhTRAIL R1, rmTRAIL R1, rhTRAIL R2, rmTRAIL R2, rhTRAIL R3, or rhTRAIL R4.
Source	Monoclonal Mouse IgG ₁ Clone # DX2
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	L cells transfected with human Fas
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied 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	10 μL/10 ⁶ cells	See Below

DATA



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 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.