Rat Fas/TNFRSF6/CD95 Alexa Fluor® 350-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF2159U
100 µg

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat Fas/TNFRSF6/CD95 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human Fas, recombinant mouse Fas, and recombinant feline Fas is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat Fas/TNFRSF6/CD95 Gln22-Lys170 Accession # NP_631933
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% 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.*

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

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. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Fas, also known as APO-1, CD95, and TNFRSF6, belongs to the death receptor family, which is a subfamily of the TNF receptor superfamily (1). Death receptors contain a cytoplasmic death domain (DD), which is required for transducing apoptotic signals. Engagement of Fas by its ligand (FasL) or agonistic anti-Fas antibodies induces dimerization and oligomerization of preformed Fas trimers. The activated receptor recruits the adaptor molecule FADD to form the Death-Inducing Signaling Complex (DISC) that also contains caspases. Upon activation, the caspases initiate a signaling cascade that induces the characteristic apoptotic phenotypes (2). 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. FasL is 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 (3).

Fas plays a role in the down-regulation of the immune reaction and has been shown to be an essential 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. Both human and mice with genetic defects in Fas accumulate abnormal lymphocytes and develop systemic autoimmunity (4). Besides the perforin/granzyme-based mechanism, the Fas-FasL system has been identified as the alternate pathway for CTL-mediated cytotoxicity (5). FasL has also been shown to function in immunological privileged sites by killing infiltrating Fas-bearing lymphocytes and inflammatory cells (6). Rat Fas cDNA encodes a 324 amino acid residue type 1 membrane protein. The extracellular domain of rat Fas shares 54.1% and 66.7% amino acid sequence identity with that of human and mouse Fas, respectively.

PRODUCT SPECIFIC NOTICES

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