

Fas (CD95) antibody (mAb)

Mouse Anti-Fas (CD95, blocking)

Instruction Manual

Catalog Number	PK-AB913-204
Quantity	500 µg
Description	The Fas receptor (CD95) mediates apoptotic signaling by Fas-ligand expressed on the surface of other cells. The Fas-FasL interaction plays an important role in the immune system and lack of this system leads to autoimmunity, indicating that Fas-mediated apoptosis removes self-reactive lymphocytes. Fas signaling is also involved in immune surveillance to remove transformed cells and virus infected cells. Binding of FAS to oligomerized FasL on another cell activates apoptotic signaling through a cytoplasmic domain termed the death domain that interacts with signaling adaptors including FAF, FADD and DAX to activate the caspase proteolytic cascade. Caspase-8 and caspase-10 are first activated, to then cleave and activate downstream caspases, and a variety of cellular substrates that lead to cell death. Caspases cleave nuclear lamins, causing the nucleus to break down and lose its normal structure. Another caspase substrate is DFF, inducing cleavage and degradation of the genome. Other caspase substrates are involved in cytoskeletal structure, cell cycle regulation and signaling pathways. Activation of JNK kinase, activation of Jun, and production of ceramide may also play roles in Fas-mediated apoptosis. Activation of fas-mediated apoptosis is opposed by I-FLICE and FAP. Viruses and tumors may escape immune surveillance in part through suppression of Fas-mediated apoptosis using similar mechanisms.
Source / Host	Mouse
Immunogen	Purified recombinant human Fas
Purification Method	Protein A affinity chromatography
Clone / IgG Subtype	clone NYRhFAS; Mouse IgG1
Specificity	Fas (CD95, blocking)
Formulation	Lyophilized
Reconstitution	Please Note: Always centrifuge product briefly before opening vial. Reconstitute with 0.5 ml sterile H2O or PBS to give a 1 mg/ml concentration. Mix gently, wash the sides of the vial and wait 30-60 seconds before use. Protein concentration: 1 mg/ml (after reconstitution).
Storage & Stability	Lyophilized: store at 4°C in a dry environment. After reconstitution, if not used within a month, aliquot and store at -20°C. Avoid repeated freeze / thaw cycles. Two years lyophilized, one month in solution at 4°C.
Applications	In a direct ELISA, a 1:10,000 dilution will yield an O.D. of 0.5 using alkaline phosphatase-conjugated rabbit anti-mouse Ig. Optimal dilution has to be determined by user. Antibody might also be suited for other applications not tested so far. This antibody is a BLOCKING antibody when in soluble form and will block FAS-mediated apoptosis. It will ACTIVATE FAS-mediated killing when immobilized.

FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.