Product Datasheet

Fas/TNFRSF6/CD95 Antibody (R-125224) - Chimeric - Azide and BSA Free

NBP2-81113-0.2mg

Unit Size: 0.2 mg

Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.

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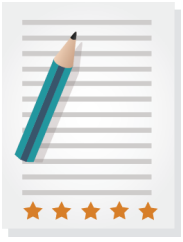
Updated 4/19/2023 v.20.1



NBP2-81113-0.2mg

Fas/TNFRSF6/CD95 Antibody (R-125224) - Chimeric - Azide and BSA Free

Product Information	
Unit Size	0.2 mg
Concentration	1 mg/ml
Storage	Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.
Clonality	Monoclonal
Clone	R-125224
Preservative	0.02% Proclin 300
Isotype	IgG Kappa
Purity	Protein A purified
Buffer	PBS

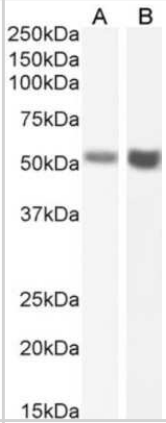
Product Description	
Host	Rabbit
Gene ID	355
Gene Symbol	FAS
Species	Human
Specificity/Sensitivity	R-125224 binds to the extracellular portion of human Fas/TNFRSF6/CD95 at an eptiope consisting of the sequence RTQNTKCRCK (aa 105-114) (pmid: 11754745). Fas is a type I membrane protein which belongs to the tumor necrosis factor (TNF) receptor/nerve growth factor (NGF) receptor superfamily. It is able to transduce apoptotic signals into the cell when bound by its ligand FasL (Fas ligand), which is primarily expressed in activated T lymphoid-myeloid lineage cells, in the eye, in reproductive organs and in some tumors. The Fas-FasL system is known to play an important role in maintaining the immune system as mice with Fas-defective lymphoproliferation (lpr) and FasL-defective generalized lymphoproliferative disease (gld) mutations develop massive lymphadenopathy and autoimmune diseases.
Immunogen	R-125224 is generated by the humanization of the murine HFE7A anti-Fas/TNFRSF6/CD95 antibody by grafting the CDR regions to the framework regions of the human 8E10 antibody and substituting key framework residues from the murine antibody into the 8E10 sequence. The original HFE7A was derived from a hybridoma cell line generated by the fusion of NS1 myeloma cells with splenocytes from Fas-deficient mice which had been immunized with partially purified recombinant human Fas-AIC2A chimera protein consisting of the extracellular region of human Fas/TNFRSF6/CD95 antigen (aa -16 to 150) and the extracellular region of the murine IL-3 receptor AIC2 (aa 3-423). The HFE7A hybridoma was selected after screening by flow cytometry for the production of antibodies with the ability to bind to the WR19L12a transformed murine T cell lymphoma cell line expressing human Fas/TNFRSF6/CD95 or the L5178YA1 cell line expressing murine Fas/TNFRSF6/CD95, but not to the parental WR19L or L5178Y cells.

Product Application Details	
Applications	Western Blot, ELISA, Flow Cytometry, Functional, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot, Flow Cytometry, ELISA, Immunocytochemistry/ Immunofluorescence, Functional

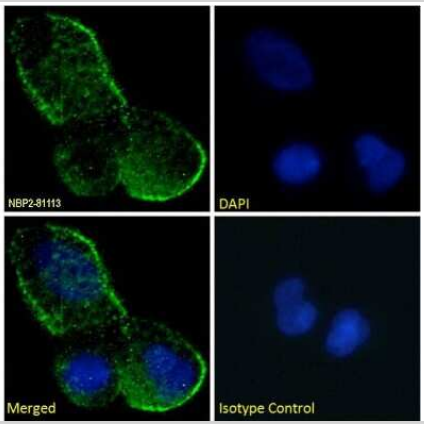
Application Notes	This chimeric rabbit antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques. R-125224 shows the same binding affinity and the same ability to induce apoptosis in WR19L12a cells that express human Fas as the parental murine HFE7A antibody. R-125224 selectively induces apoptosis in type I activated lymphocytes but not in type II cells. R-125224 is able to induce apoptosis in the human lymphoid cell lines H9 and SKW6.4, as well as activated human lymphocytes, when cross-linked with anti-hIgG secondary antibodies. The antibody is unable to induce apoptosis in HPB-ALL cells, Jurkat cells or human hepatocytes. R-125224 has been used in vivo where it has been shown to greatly reduce the number of activated human human CD3+ Fas+ T cells in a SCID mouse model possessing a functional human immune system. Fas antigen tissue distribution in cynomolgus monkeys with collagen-induced arthritis at the arm joint (CIA monkeys) has been studied using [125I]-Labeled R-125224. High radioactivity in the bone marrow, thymus, lungs, liver, adrenals, spleen, ovaries, axillary lymph node and mesenteric lymph node compared to the radioactivity in the plasma was observed, which correlates with Fas expression. Fas can also be detected by R-125224 by ELISA.

Images

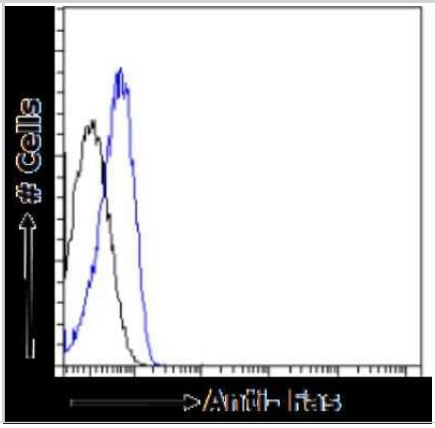
Western Blot: Fas/TNFRSF6/CD95 Antibody (R-125224) - Chimeric [NBP2-81113] - Western Blot using Fas/TNFRSF6/CD95 Antibody (R-125224) [NBP2-81113]. Human testis (A) and human ovary (B) lysate samples (35ug protein in RIPA buffer) were resolved on a 10% SDS PAGE gel and blots probed with the chimeric rabbit IgG version of R-125224 [NBP2-81113] at 2 ug/ml before detection using an anti-rabbit secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence. The expected running size for unmodified Fas is 37.7kDa, but this protein is glycosylated at several positions leading to the observed running size.



Immunocytochemistry/Immunofluorescence: Fas/TNFRSF6/CD95 Antibody (R-125224) - Chimeric [NBP2-81113] - Immunofluorescence staining of fixed MCF7 cells with [NBP2-81113]. Immunofluorescence analysis of paraformaldehyde fixed MCF7 cells permeabilized with 0.15% Triton and stained with the chimeric mouse IgG1 version of R-125224 (NBP2-81113) at 10 ug/ml for 1h followed by Alexa Fluor 488 secondary antibody (2 ug/ml), showing membrane staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom NBP2-81113, DAPI, merged channels and an isotype control. The isotype control was stained with an anti-unknown specificity antibody followed by Alexa Fluor 488 secondary antibody.



Flow Cytometry: Fas/TNFRSF6/CD95 Antibody (R-125224) - Chimeric [NBP2-81113] - Flow-cytometry using the Fas/TNFRSF6/CD95 Antibody (R-125224) [NBP2-81113]. Jurkat cells were fixed using 2% PFA, permeabilised using 0.5% Triton and stained with unimmunized rabbit IgG antibody (MOPC-21; isotype control, black line) or the rabbit IgG-chimeric version of R-125224 (NBP2-81113, blue line) at a dilution of 1:100 for 1h at RT. After washing, bound antibody was detected using a goat anti-rabbit IgG AlexaFluor 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.



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Products Related to NBP2-81113-0.2mg

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-61594-5ug	Recombinant Human Fas/TNFRSF6/CD95 Protein
210-TA-005	TNF-alpha [Unconjugated]

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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