

anti-Mouse TCR Antibody | anti-TCR antibody

Anti-TCR [H57-597], Hamster (Armenian) IgG

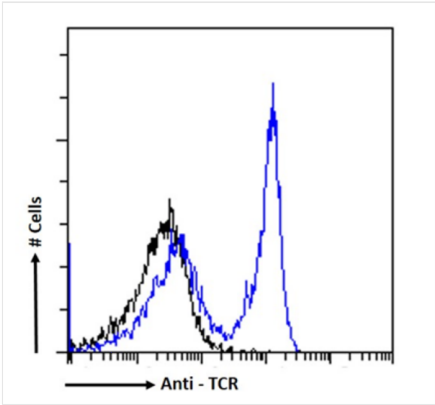
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72248	Hamster (Armenian)	Mouse	Immunoprecipitation, Immunohistochemistry, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

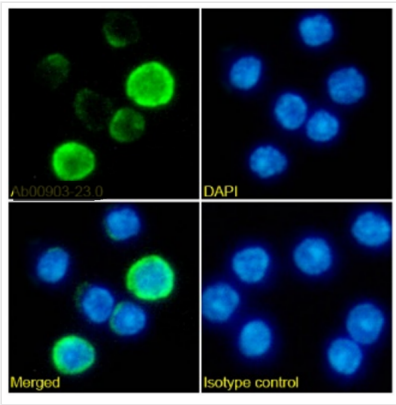
TCR; Anti-TCR [H57-597]; Hamster (Armenian) IgG; TCR-beta; T cell receptor; T-cell receptor; T cell receptor beta chain; TCRB; TRB; TCB1; Ti; anti-TCR antibody

PRODUCT SPECIFICATIONS

Host	Hamster (Armenian)
Reactivity	Mouse
Isotype	Hamster (Armenian) IgG, Lambda
Clone Number	H57-597
Specificity	mAb H57-597 reacts with surface receptors on all alpha-beta TCR bearing cells, but does not react with receptors on gamma-delta T cells. H57-597 is directed to an epitope within the FG loop of the C region of TCR beta chain.
Purity/Purification	Protein A affinity purified
Form/Format	PBS with 0.02% Proclin 300.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-TCR antibody	IP (Immunoprecipitation), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry)
Immunogen	Hamsters were immunised with affinity purified DO-11.10 TCR, and produced detectable anti-TCR antibodies which were judged by the ability of the anti-sera to immunoprecipitate TCR from surface labelled DO-11.10 T cell hybridomas. Hamster 57 was selected for hybridisation, and B cell hybridomas were produced using polyethylene glycol fusion of hamster splenic B cells to the mouse myeloma variant. Selected mAb were screened after subsequent culturing for their ability to immunoprecipitate TCR from detergent lysates of surface-radiolabelled murine T cell hybridomas.
Preparation and Storage	Store at 4 degree C for up to 3 months. For longer storage, aliquot and store at -20 degree C.



FCM/FACS (Flow Cytometry)
Flow cytometry using the Anti-TCR antibody H57-597 (AAA72248). Paraformaldehyde fixed mouse splenocytes were stained with anti-unknown specificity antibody or the rabbit IgG version of H57-597 (AAA72248-23.0, blue line) at a dilution of 1:100 for 1h at RT. After washing, the 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.



IF (Immunofluorescence)
Immunofluorescence staining of mouse splenocytes with anti-TCR (AAA72248) H57-597. Immunofluorescence analysis of paraformaldehyde fixed mouse splenocytes on Shi-fix coverslips stained with the chimeric rabbit IgG version of H57-597 (AAA72248-23.0) 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 AAA72248-23.0, DAPI, merged channels and an isotype control. The isotype control was an unknown specificity antibody followed by staining with Alexa Fluor 488 secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-TCR antibody	In an immobilised form, this antibody can directly activate T cells bearing alpha-beta TCR to produce IL-2. H57-597 has also been used to construct a Fab fragment which has been complexed with deglycosylated TCRs for their crystallisation for structure determination (Liu 1996). Flow cytometry is another application of this antibody, where H57-597 has been used to analyse TCR-beta expression in different T cell populations (Tsukumo 2006).
Product Categories/Family for anti-TCR antibody	Immunology; Cell Type Marker
References	Kubo et al. Characterisation of a monoclonal antibody which detects all murine alpha-beta T cell receptors J Immunol. 1989 Apr 15;142(8):2736-42. PMID:2467936

NCBI AND UNIPROT INFORMATION

NCBI GI #	135513
UniProt Accession #	P01852
Molecular Weight	19,346 Da
NCBI Official Full Name	T-cell receptor beta-1 chain C region
UniProt Protein Name	T-cell receptor beta-1 chain C region

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.