

Rabbit anti-Mouse TCR Antibody | anti-TCR antibody

Anti-TCR [H57-597], Rabbit IgG

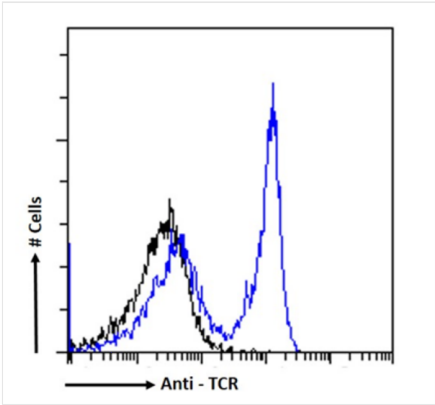
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72249	Rabbit	Mouse	Immunoprecipitation, Immunohistochemistry, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

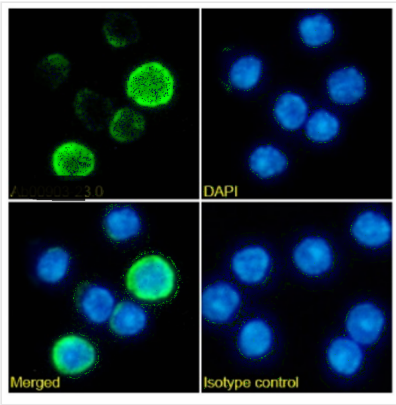
TCR; Anti-TCR [H57-597]; Rabbit IgG; TCR-beta; T cell receptor; T-cell receptor; T cell receptor beta chain; TCRB; TRB; TCB1; Ti; anti-TCR antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse
Isotype	Rabbit 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.
Chimeric Use Statement	This chimeric rabbit antibody was made using the variable domain sequences of the original Hamster IgG format, for improved compatibility with existing reagents, assays and techniques.
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 (AAA72249). Paraformaldehyde fixed mouse splenocytes were stained with anti-unknown specificity antibody or the rabbit IgG version of H57-597 (AAA72249-23.0, 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 (AAA72249) H57-597. Immunofluorescence analysis of paraformaldehyde fixed mouse splenocytes on Shi-fix coverslips stained with the chimeric rabbit IgG version of H57-597 (AAA72249-23.0) 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 AAA72249-23.0, 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.