

Anti-TRBV9 Reference Antibody (Seniprutug)

Catalog # APR11273

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	A0A0B4J1U6
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1-REM
Calculated MW	12608

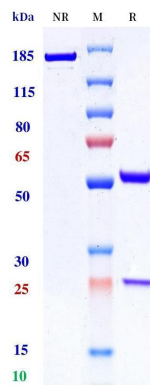
Additional Information

Target/Specificity	TRBV9
Expression system	CHO

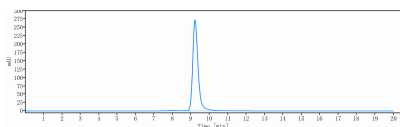
Protein Information

Name	TRBV9 {ECO:0000303 Ref.2}
Function	V region of the variable domain of T cell receptor (TR) beta chain that participates in the antigen recognition (PubMed:24600447). Alpha-beta T cell receptors are antigen specific receptors which are essential to the immune response and are present on the cell surface of T lymphocytes. Recognize peptide-major histocompatibility (MH) (pMH) complexes that are displayed by antigen presenting cells (APC), a prerequisite for efficient T cell adaptive immunity against pathogens (PubMed:25493333). Binding of alpha-beta TR to pMH complex initiates TR-CD3 clustering on the cell surface and intracellular activation of LCK that phosphorylates the ITAM motifs of CD3G, CD3D, CD3E and CD247 enabling the recruitment of ZAP70. In turn ZAP70 phosphorylates LAT, which recruits numerous signaling molecules to form the LAT signalosome. The LAT signalosome propagates signal branching to three major signaling pathways, the calcium, the mitogen-activated protein kinase (MAPK) kinase and the nuclear factor NF-kappa-B (NF-kB) pathways, leading to the mobilization of transcription factors that are critical for gene expression and essential for T cell growth and differentiation (PubMed:23524462). The T cell repertoire is generated in the thymus, by V-(D)-J rearrangement. This repertoire is then shaped by intrathymic selection events to generate a peripheral T cell pool of self-MH restricted, non-autoaggressive T cells. Post-thymic interaction of alpha-beta TR with the pMH complexes shapes TR structural and functional avidity (PubMed:15040585).
Cellular Location	Cell membrane.

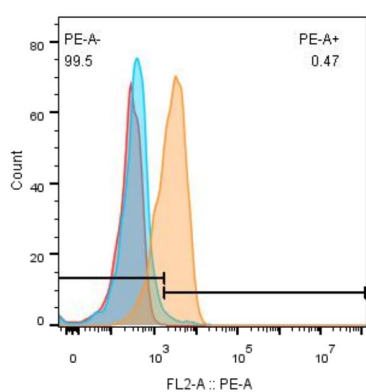
Images



Anti-TRBV9 Reference Antibody (Seniprutug) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti-TRBV9 Reference Antibody (Seniprutug) is 99.1%, determined by SEC-HPLC.



PLVX-puro-CRS-hu-TRBV9(A0A0B4J1U6)-FL cells at 1×10^5 cell/well can bind Seniprutug.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.