

UNC93B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59022

Product Information

Application IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Rat
Host
Clonality
Polyclonal
Calculated MW
Physical State

Q9H1C4
Rat
Polyclonal
Calculated MW
66631
Liquid

Immunogen KLH conjugated synthetic peptide derived from human UNC93B

Epitope Specificity 451-550/597

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Membrane; Multi pass membrane protein.

SIMILARITY Belongs to the unc-93 family.

SUBUNIT Interacts with TLR3, TLR7, and TLR9 (probably via transmembrane domain).

Post-translational N-glycosylated (By similarity). **modifications**

DISEASEDefects in UNC93B1 are associated with herpes simplex encephalitis type 1

(HSE1) [MIM:610551]. HSE is a rare complication of human herpesvirus 1 (HHV-1) infection, occurring in only a small minority of HHV-1 infected individuals. HSE is characterized by hemorrhagic necrosis of parts of the temporal and frontal lobes. Onset is over several days and involves fever, headache, seizures, stupor, and often coma, frequently with a fatal outcome. Note=Mutations in UNC93B1 resulting in autosomal recessive UNC93B1 deficieny predispose otherwise healthy individuals to isolated herpes simplex encephalitis due to impaired IFNs production. UNC93B1 deficieny, however, does not compromise immunity to most pathogens, unlike most known

primary immunodeficiencies.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions UNC93B is a protein with similarity to the C. elegans unc93 protein. The

Unc93 protein is involved in the regulation or coordination of muscle

contraction in the worm. Defects in UNC93B are associated with susceptibility to herpes simplex encephalitis (HSE) which is a rare complication of human

herpesvirus 1 (HHV-1) infection.

Additional Information

Gene ID 81622

Other Names Protein unc-93 homolog B1, Unc-93B1, hUNC93B1, UNC93B1, UNC93,

UNC93B

Target/Specificity Expressed in plasmocytoid dendritic cells (at protein level). Highly expressed

in antigen-presenting cells. Expressed in heart, and at lower level in kidney.

Expressed at low level in other tissues.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name UNC93B1 (<u>HGNC:13481</u>)

Synonyms UNC93, UNC93B

Function Plays an important role in innate and adaptive immunity by regulating

nucleotide-sensing Toll-like receptor (TLR) signaling. Required for the transport of a subset of TLRs (including TLR3, TLR7 and TLR9) from the endoplasmic reticulum to endolysosomes where they can engage pathogen nucleotides and activate signaling cascades. May play a role in autoreactive

B-cells removal.

Cellular Location Endoplasmic reticulum membrane; Multi-pass membrane protein. Endosome

Lysosome. Cytoplasmic vesicle, phagosome Note=Relocalizes from

endoplasmic reticulum to endosome and lysosome upon cell-stimulation with CpG dinucleotides (By similarity) Colocalizes with LAMP5 in large endosomal intracellular vesicles {ECO:0000250, ECO:0000269|PubMed:18082565,

ECO:0000269 | PubMed:21642595}

Tissue Location Expressed in plasmocytoid dendritic cells (at protein level). Highly expressed

in antigen-presenting cells. Expressed in heart, and at lower level in kidney.

Expressed at low level in other tissues.

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