

ASNA1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58814

Product Information

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

Primary Accession
Reactivity
Rat
Host
Clonality
Polyclonal
Calculated MW
38793
Physical State
Liquid

Immunogen KLH conjugated synthetic peptide derived from human ASNA1

Epitope Specificity 64-155/348

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 Cytoplasm. Endoplasmic reticulum. Nucleus, nucleolus.

SIMILARITY Belongs to the arsA ATPase family.

SUBUNIT Homodimer (By similarity). Component of a transmembranedomain

recognition complex (TRC) (By similarity). Interacts with SERP1 and SEC61B (By

similarity). Interacts with WRB.

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

human, therapeutic or diagnostic applications.

Background Descriptions ASNA1 is the human homolog of the E.coli arsA gene which is an ATPase, and

is the catalytic component of a multisubunit oxyanion pump responsible for

resistance to arsenicals and antimonials.

Additional Information

Gene ID 439

Other Names ATPase GET3 {ECO:0000255 | HAMAP-Rule:MF_03112}, 3.6.-.-

{ECO:0000255|HAMAP-Rule:MF_03112}, Arsenical pump-driving ATPase {ECO:0000255|HAMAP-Rule:MF_03112}, Arsenite-stimulated ATPase {ECO:0000255|HAMAP-Rule:MF_03112}, Guided entry of tail-anchored proteins factor 3, ATPase {ECO:0000255|HAMAP-Rule:MF_03112}, Transmembrane domain recognition complex 40 kDa ATPase subunit, hARSA-I, hASNA-I, GET3 {ECO:0000255|HAMAP-Rule:MF_03112},

ECO:0000312 | HGNC:HGNC:752}

Target/Specificity Expressed in the epithelial cells of theliver, kidney, and stomach wall, in the

adrenal medulla, in theislet cells of the pancreas, in the red pulp of the

spleen, and incardiac and skeletal muscle.

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

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 GET3 {ECO:0000255 | HAMAP-Rule:MF_03112,

ECO:0000312 | HGNC:HGNC:752}

Function ATPase required for the post-translational delivery of tail- anchored (TA)

proteins to the endoplasmic reticulum (PubMed:<u>17382883</u>). Recognizes and selectively binds the transmembrane domain of TA proteins in the cytosol. This complex then targets to the endoplasmic reticulum by membrane-bound receptors GET1/WRB and CAMLG/GET2, where the tail-anchored protein is

released for insertion. This process is regulated by ATP binding and

hydrolysis. ATP binding drives the homodimer towards the closed dimer state, facilitating recognition of newly synthesized TA membrane proteins. ATP hydrolysis is required for insertion. Subsequently, the homodimer reverts towards the open dimer state, lowering its affinity for the GET1-CAMLG receptor, and returning it to the cytosol to initiate a new round of targeting.

May be involved in insulin signaling.

Cellular Location Cytoplasm. Endoplasmic reticulum. Nucleus, nucleolus

Tissue Location Expressed in the epithelial cells of the liver, kidney, and stomach wall, in the

adrenal medulla, in the islet cells of the pancreas, in the red pulp of the

spleen, and in cardiac and skeletal muscle.

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