

# Rabbit Anti-ASNA1 antibody

## SL7972R

Product Name:	ASNA1
Chinese Name:	砷酸盐转运三磷酸腺苷酶抗体
Alias:	ARSA 1; ARSA; ArsA arsenite transporter ATP binding homolog 1; ArsA arsenite transporter, ATP binding, E. coli, homolog of, 1; ArsA arsenite transporter, ATP-binding, homolog 1 (bacterial); ARSA I; ARSAI; ARSAI; Arsenical pump driving ATPase; Arsenical resistance ATPase; Arsenite translocating ATPase; Arsenite transporting ATPase; Arsenite-stimulated ATPase; ASNA 1; ASNA I; Asna1 protein; ASNAI; ATPase Asna1; GET3; ASNA HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Horse, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	39kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ASNA1:64-155/348
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	PubMed
Product Detail:	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.

#### **Function:**

This gene represents the human homolog of the bacterialars A gene, encoding the arsenite-stimulated ATPase component of thearsenite transporter responsible for resistance to arsenicals. This protein is also a central component of a transmembrane domain (TMD)recognition complex (TRC) that is involved in the post-translational delivery of tail-anchored (TA) proteins from the cytosol to the endoplasmic reticulum (ER). It recognizes and selectively binds the TMD of TA proteins in the cytosol, anddelivers them to the ER for insertion. [provided by RefSeq, Oct2011]. [FUNCTION] ATPase required for the post-translational delivery oftail-anchored (TA) proteins to the endoplasmic reticulum. Recognizes and selectively binds the transmembrane domain of TAproteins in the cytosol. This complex then targets to theendoplasmic reticulum by membrane-bound receptors, where thetail-anchored protein is released for insertion. This process is regulated by ATP binding and hydrolysis. ATP binding drives thehomodimer towards the closed dimer state. facilitating recognition of newly synthesized TA membrane proteins. ATP hydrolysis isrequired for insertion. Subsequently, the homodimer reverts towards the open dimer state, lowering its affinity for the membrane-boundreceptor, and returning it to the cytosol to initiate a new roundof targeting (By similarity). May be involved in insulin signaling.

#### Subunit:

Homodimer (By similarity). Component of a transmembranedomain recognition complex (TRC) (By similarity). Interacts with SERP1 and SEC61B (By similarity). Interacts with WRB.

#### Subcellular Location:

Cytoplasm. Endoplasmic reticulum. Nucleus, nucleolus.

#### Tissue 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.

### Similarity:

Belongs to the arsA ATPase family.

**SWISS:** 

O43681

Gene ID:

439

Database links:

Entrez Gene: 439Human

Entrez Gene: 56495Mouse

Entrez Gene: 288919Rat

GenBank: NP 004308.2Human

Omim: 601913Human

SwissProt: O43681Human

SwissProt: O54984Mouse

Unigene: 465985Human

<u>Unigene: 41475</u>Mouse

## Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.