

# Product datasheet

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ARG59133 anti-TAP1 antibody

Package: 50 μg Store at: -20°C

#### Summary

Product Description Rabbit Polyclonal antibody recognizes TAP1

Tested Reactivity Hu
Tested Application IHC-P

Host Rabbit

**Clonality** Polyclonal

Isotype IgG

Target Name TAP1

Species Human

Immunogen Synthetic peptide corresponding to aa. 438-471 of Human TAP1.

(RSFANEEGEAQKFREKLQEIKTLNQKEAVAYAVN)

Conjugation Un-conjugated

Alternate Names Really interesting new gene 4 protein; ABC17; TAP1\*0102N; ATP-binding cassette sub-family B member

2; TAP1N; RING4; Antigen peptide transporter 1; ABCB2; APT1; Peptide transporter involved in antigen processing 1; PSF-1; D6S114E; PSF1; Peptide transporter PSF1; Peptide transporter TAP1; Peptide

supply factor 1

## **Application Instructions**

Application table	Application	Dilution
	IHC-P	0.5 - 1 μg/ml

Application Note IHC-P: Antigen Retrieval: By heat mediation.

\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations

should be determined by the scientist.

#### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.

Preservative 0.05% Sodium azide

Stabilizer 5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol

TAP1

Gene Full Name

transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)

Background

The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. The protein encoded by this gene is involved in the pumping of degraded cytosolic peptides across the endoplasmic reticulum into the membrane-bound compartment where class I molecules assemble. Mutations in this gene may be associated with ankylosing spondylitis, insulin-dependent diabetes mellitus, and celiac disease. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2014]

Function

Involved in the transport of antigens from the cytoplasm to the endoplasmic reticulum for association with MHC class I molecules. Also acts as a molecular scaffold for the final stage of MHC class I folding, namely the binding of peptide. Nascent MHC class I molecules associate with TAP via tapasin. Inhibited by the covalent attachment of herpes simplex virus ICP47 protein, which blocks the peptide-binding site of TAP. Inhibited by human cytomegalovirus US6 glycoprotein, which binds to the lumenal side of the TAP complex and inhibits peptide translocation by specifically blocking ATP-binding to TAP1 and prevents the conformational rearrangement of TAP induced by peptide binding. Inhibited by human adenovirus E3-19K glycoprotein, which binds the TAP complex and acts as a tapasin inhibitor, preventing MHC class I/TAP association. Expression of TAP1 is down-regulated by human Epstein-Barr virus vIL-10 protein, thereby affecting the transport of peptides into the endoplasmic reticulum and subsequent peptide loading by MHC class I molecules. [UniProt]

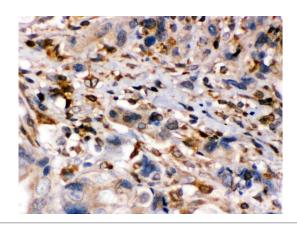
Calculated Mw

87 kDa

Cellular Localization

Endoplasmic reticulum membrane; Multi-pass membrane protein. Note=The transmembrane segments seem to form a pore in the membrane. [UniProt]

### **Images**



#### ARG59133 anti-TAP1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer stained with ARG59133 anti-TAP1 antibody.