

## **Anti-TAP2 Picoband Antibody**

**Catalog # ABO12510** 

# **Specification**

# **Anti-TAP2 Picoband Antibody - Product Information**

Application WB
Primary Accession Q03519
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Antigen peptide transporter 2(TAP2) detection. Tested with WB in Human.

### Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## **Anti-TAP2 Picoband Antibody - Additional Information**

### **Gene ID** 6891

#### **Other Names**

Antigen peptide transporter 2, APT2, ATP-binding cassette sub-family B member 3, Peptide supply factor 2, Peptide transporter PSF2, PSF-2, Peptide transporter TAP2, Peptide transporter involved in antigen processing 2, Really interesting new gene 11 protein, TAP2, ABCB3, PSF2, RING11, Y1

#### **Calculated MW**

75664 MW KDa

## **Application Details**

Western blot, 0.1-0.5 µg/ml, Human<br>

### **Subcellular Localization**

Endoplasmic reticulum membrane; Multi-pass membrane protein. The transmembrane segments seem to form a pore in the membrane.

# **Protein Name**

Antigen peptide transporter 2

# **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

## **Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human TAP2 (611-651aa QKQRLAIARALVRDPRVLILDEATSALDVQCEQALQDWNSR), different from the related mouse sequence by five amino acids, and from the related rat sequence by six amino acids.

## **Purification**



Immunogen affinity purified.

**Cross Reactivity**No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

# Anti-TAP2 Picoband Antibody - Protein Information

Name TAP2 {ECO:0000303|PubMed:10605026, ECO:0000312|HGNC:HGNC:44}

### **Function**

ABC transporter associated with antigen processing. In complex with TAP1 mediates unidirectional translocation of peptide antigens from cytosol to endoplasmic reticulum (ER) for loading onto MHC class I (MHCI) molecules (PubMed: <a href="http://www.uniprot.org/citations/25377891" target=" blank">25377891</a>, PubMed:<a href="http://www.uniprot.org/citations/25656091" target="blank">25656091</a>). Uses the chemical energy of ATP to export peptides against the concentration gradient (PubMed: <a href="http://www.uniprot.org/citations/25377891" target=" blank">25377891</a>). During the transport cycle alternates between 'inward-facing' state with peptide binding site facing the cytosol to 'outward-facing' state with peptide binding site facing the ER lumen. Peptide antigen binding to ATP-loaded TAP1-TAP2 induces a switch to hydrolysis-competent 'outward-facing' conformation ready for peptide loading onto nascent MHCI molecules. Subsequently ATP hydrolysis resets the transporter to the 'inward facing' state for a new cycle (PubMed: <a href="http://www.uniprot.org/citations/11274390" target="\_blank">11274390</a>, PubMed:<a href="http://www.uniprot.org/citations/25377891" target="blank">25377891</a>, PubMed:<a href="http://www.uniprot.org/citations/25656091" target="blank">25656091</a>). Typically transports intracellular peptide antigens of 8 to 13 amino acids that arise from cytosolic proteolysis via IFNG-induced immunoproteasome. Binds peptides with free N- and C-termini, the first three and the C-terminal residues being critical. Preferentially selects peptides having a highly hydrophobic residue at position 3 and hydrophobic or charged residues at the C-terminal anchor. Proline at position 2 has the most destabilizing effect (PubMed:<a href="http://www.uniprot.org/citations/11274390" target="\_blank">11274390</a>, PubMed:<a href="http://www.uniprot.org/citations/7500034" target=" blank">7500034</a>, PubMed:<a href="http://www.uniprot.org/citations/9256420" target="blank">9256420</a>). As a component of the peptide loading complex (PLC), acts as a molecular scaffold essential for peptide-MHCI assembly and antigen presentation (PubMed: <a href="http://www.uniprot.org/citations/1538751" target="\_blank">1538751</a>, PubMed:<a href="http://www.uniprot.org/citations/25377891" target="\_blank">25377891</a>, PubMed:<a href="http://www.uniprot.org/citations/26611325" target="blank">26611325</a>).

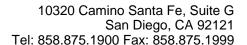
## **Cellular Location**

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

# **Anti-TAP2 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides





• Dot Blot

- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Anti-TAP2 Picoband Antibody - Images**



Anti-TAP2 Picoband antibody, ABO12510, Western blottingAll lanes: Anti TAP2 (ABO12510) at 0.5ug/mlWB: HELA Whole Cell Lysate at 40ugPredicted bind size: 87KDObserved bind size: 87KD

## Anti-TAP2 Picoband Antibody - Background

Transporter, ATP-binding cassette, major histocompatibility complex 2(TAP2) is a gene in humans that encodes the protein Antigen peptide transporter 2. The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. The gene is assigned to human chromosome 6p21.3. It is located 7 kb telomeric to gene family member ABCB2. The protein encoded by this gene is involved in antigen presentation. And this protein forms a heterodimer with ABCB2 in order to transport peptides from the cytoplasm to the endoplasmic reticulum.