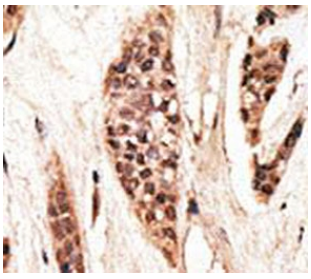
TAP1 Antibody (F40131)

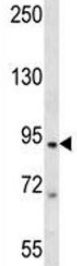
Catalog No.	Formulation	Size
F40131-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F40131-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

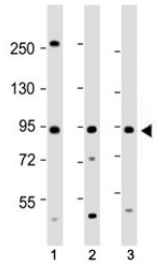
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q03518
Localization	Cytoplasmic
Applications	IHC (Paraffin) : 1:50-1:100 Western Blot : 1:1000
Limitations	This TAP1 antibody is available for research use only.



IHC analysis of FFPE human breast carcinoma tissue stained with the TAP1 antibody



TAP1 antibody western blot analysis in Jurkat lysate. Expected/observed molecular weight ~87 kDa.



TAP1 antibody western blot analysis in human 1) HepG2, 2) Jurkat and 3) SW480 cell lysate. Expected/observed molecular weight ~87 kDa.

Description

TAP (Transporter associated with antigen processing) is an integral transmembrane protein involved in the transport of antigens from the cytoplasm to the endoplasmic reticulum for association with MHC class I molecules. It 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. TAP is inhibited by the covalent attachment of herpes simplex virus ICP47 protein, which blocks the peptide-binding site of TAP. It is 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 TAP and prevents the conformational rearrangement of TAP induced by peptide binding. TAP is also 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 TAP 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. TAP1 and TAP2 form a heterodimer of TAP1 and TAP2, and the peptide-binding site is shared between the cytoplasmic loops of TAP1 and TAP2. TAP, inducible by interferon gamma, belongs to the ABC transporter family, MDR subfamily.

Application Notes

Titration of the TAP1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 765-794 from the human protein was used as the immunogen for this TAP1 antibody.

Storage

Aliquot the TAP1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.