

Datasheet for ABIN7566364

TAPBPL Protein (AA 19-405) (Fc Tag)



Overview

Quantity:	50 μg
Target:	TAPBPL
Protein Characteristics:	AA 19-405
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TAPBPL protein is labelled with Fc Tag.

Product Details

Purpose:	TAPBPL (human):Fc (human) (rec.)
Cross-Reactivity:	Human
Characteristics:	The extracellular domain of human TAPBPL (aa 19-405) is fused at the C-terminus to the Fc portion of human IgG1.
Purity:	>95 % (SDS-PAGE)
Endotoxin Level:	<0.01EU/µg purified protein (LAL test).

Target Details

Target:	TAPBPL
Alternative Name:	TAPBPL (TAPBPL Products)
Background:	Tapasin-related Protein, TAPASIN-R, TAP-binding Protein-like, Tapasin-like, TAPBPR, TAP

Binding Protein-related

T cells play critical roles in the adaptive immune system, protecting the human body against cancer, bacterial, viral, fungal and parasitic infections. T cell immune response is tightly controlled by immune checkpoint proteins that negatively or positively regulate T cell response. Among the immune checkpoint proteins, the B7 family plays a key role in controlling immune responses and belongs to the immunoglobulin (Ig) superfamily. A number of B7 family ligands have been identified, such as B7-1 (CD80), B7-2 (CD86), PD-L1 (B7-H1), PD-L2 (B7-DC), B7-H2 [inducible T cell co-stimulator ligand (ICOS)], B7-H3, B7-H4 (B7x, B7S1), B7-H5 (VISTA) and B7-H6. Because of the potential clinical applications of immune checkpoint proteins, there has been intense interest in identifying additional T-cell regulators. Recently, new antigen processing (TAP) binding protein-like (TAPBPL)/TAP binding protein-related (TAPBPR) molecule has been shown to share significant sequence similarity with some known B7 family members. TAPBPL protein is expressed on the surface of T cells, on antigen-presenting cells (APCs) including resting B cells, monocytes, macrophages, and DCs, as well as on some cancer cells including leukemia cells. TAPBPL behaves like other immune checkpoint proteins such as B7-H5 / VISTA or PD-L1 with a soluble recombinant version TAPBPL-Fc fusion protein that inhibits the proliferation and activation of CD4 and CD8 T cells in vitro and ameliorates autoimmune disease EAE in vivo. In contrast, treatment with anti-TAPBPL blocking antibody enhances antitumor immunity and inhibits tumor growth in vivo. Therefore, TAPBPL contains typical features of B7 family members, suggesting that it is a B7 family member or a B7 family-related molecule.

Molecular Weight:

~80-90kDa (SDS-PAGE)

UniProt:

Q9BX59

Application Details

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	1 mg/mL after reconstitution
Concentration:	1 mg/mL
Buffer:	Contains PBS.
Handling Advice:	After reconstitution, prepare aliquots and store at -20 °C. Avoid freeze/thaw cycles. Centrifuge

Handling

	lyophilized vial before opening and reconstitution. PBS containing at least 0.1 % BSA should be used for further dilutions.
Storage:	4 °C,-20 °C
Storage Comment:	Short Term Storage: +4°C Long Term Storage: -20°C Use & Stability: Stable for at least 6 months after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.