

#### KD-Validated Anti-CLPTM1 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1155

### **Specification**

## **KD-Validated Anti-CLPTM1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<u>096005</u>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 76 kDa, observed, 90 kDa KDa
Gene Name	CLPTM1
Aliases	CLPTM1; CLPTM1 Regulator Of GABA Type
	A Receptor Forward Trafficking; Cleft Lip
	And Palate Associated Transmembrane
	Protein 1; Cleft Lip And Palate
	Transmembrane Protein 1; Putative Lipid
	Scramblase CLPTM1; CLPTM1,
	Transmembrane Protein
Immunogen	A synthesized peptide derived from
-	CLPTM1

### KD-Validated Anti-CLPTM1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 1209 Other Names Putative lipid scramblase CLPTM1, Cleft lip and palate transmembrane protein 1, CLPTM1

### **KD-Validated Anti-CLPTM1 Rabbit Monoclonal Antibody - Protein Information**

Name CLPTM1

#### Function

Involved in GABAergic but not glutamatergic transmission. Binds and traps GABAA receptors in the endoplasmic reticulum (ER). Modulates postsynaptic GABAergic transmission, and therefore inhibitory neurotransmission, by reducing the plasma membrane expression of these receptors. Altered GABAergic signaling is one among many causes of cleft palate (By similarity). Might function as a lipid scramblase, translocating lipids in membranes from one leaflet to the other one (By similarity). Required for efficient glycosylphosphatidylinositol (GPI) inositol deacylation in the ER, which is a crucial step to switch GPI- anchored proteins (GPI-APs) from protein folding to transport states (PubMed:<a href="http://www.uniprot.org/citations/29255114" target=" blank">>29255114</a>). May play a role in T-cell development (By similarity).

Cellular Location Membrane; Multi-pass membrane protein

**Tissue Location** 



Widely expressed..

# KD-Validated Anti-CLPTM1 Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>





Western blotting analysis using anti-CLPTM1 antibody (Cat#AGI1155). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CLPTM1 antibody (Cat#AGI1155, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

kDa 250 <b>—</b>	W.	ShRWA		kDa 250 <b>—</b>	Nr.	shawa			
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100 - 75 -				100 <b>—</b> 75 <b>—</b>	-		CLP	TM1 IS	
50				50 <b>-</b>					
50-	-	1	🗲 β-Tubulin	37-					1
37 -				25 -				+ @20	
25 -				20 -					

Western blotting analysis using anti-CLPTM1 antibody (Cat#AGI1155). CLPTM1 expression in wild type (WT) and CLPTM1 shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-CLPTM1 antibody (Cat#AGI1155, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Flow cytometric analysis of CLPTM1 expression in HT-1080 cells using CLPTM1 antibody (Cat#AGI1155, 1:2,000). Green, isotype control; red, CLPTM1.



Immunocytochemical staining of HT-1080 cells with CLPTM1 antibody (Cat#AGI1155, 1:1,000). Nuclei were stained blue with DAPI; CLPTM1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20  $\mu$ m.