

Datasheet for ABIN2483725

**anti-SLC17A7 antibody (AA 493-560) (APC)**[Go to Product page](#)**3** Images

## Overview

Quantity:	100 µg
Target:	SLC17A7
Binding Specificity:	AA 493-560
Reactivity:	Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SLC17A7 antibody is conjugated to APC
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

## Product Details

Immunogen:	Fusion protein amino acids 493-560 (cytoplasmic C-terminus) of rat VGlut1
Clone:	S28-9
Isotype:	IgG1
Specificity:	Detects ~52 kDa. No cross-reactivity against VGlut2.
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Protein G Purified

## Target Details

Target:	SLC17A7
Alternative Name:	VGLUT1 ( <a href="#">SLC17A7 Products</a> )

## Target Details

**Background:** VGLUT1 is expressed in a subset of glutamate neurons and transports glutamate into native synaptic vesicles from the brain, exhibiting a conductance for chloride that is blocked by glutamate (1). Vesicular glutamate transport has a substantially lower apparent affinity than the plasma membrane excitatory amino acid transporters. Glutamate transport by VGLUT1 is saturated with a K(m) of approximately 2 mM, in the same range as transport by synaptic vesicles. Finally, plasma membrane glutamate transporters recognize both aspartate and glutamate as substrates, whereas VGLUT1 does not recognize aspartate (2).

**Gene ID:** 116638

**NCBI Accession:** [NP\\_446311](#)

**UniProt:** [Q62634](#)

## Application Details

**Application Notes:**

- WB (1:1000)
- optimal dilutions for assays should be determined by the user.

**Comment:** 1 µg/ml of ABIN2483725 was sufficient for detection of VGLut1 in 20 µg of rat brain lysate by colorimetric immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

**Restrictions:** For Research Use only

## Handling

**Format:** Liquid

**Concentration:** 1 mg/mL

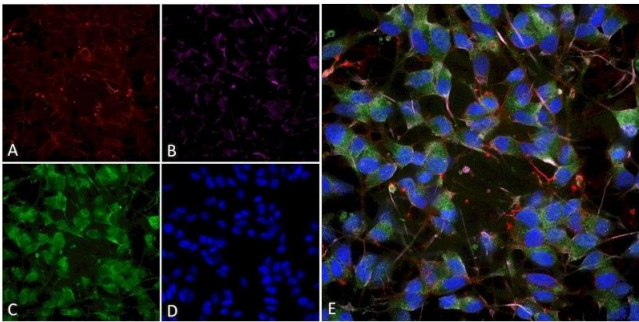
**Buffer:** PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated

**Preservative:** Sodium azide

**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

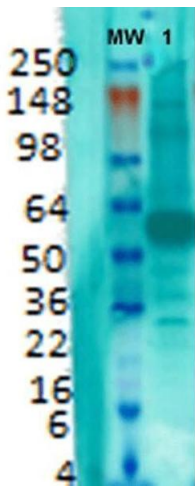
**Storage:** 4 °C

**Storage Comment:** Conjugated antibodies should be stored at 4°C



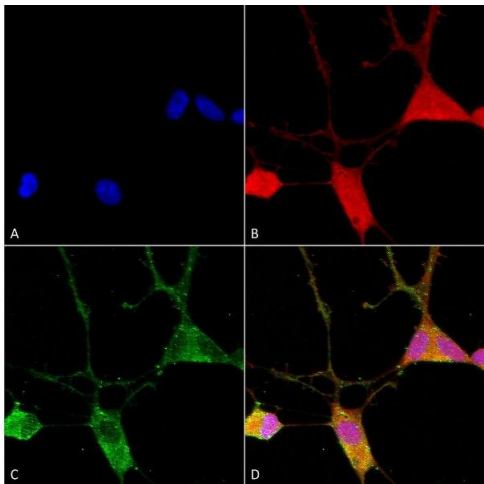
### Immunocytochemistry

**Image 1.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-VGLUT1 Monoclonal Antibody, Clone S28-9 (ABIN2483725). Tissue: Differentiated SH-SY5Y. Species: Human. Primary Antibody: Mouse Anti-VGLUT1 Monoclonal Antibody (ABIN2483725) at 1:100. Secondary Antibody: AlexaFluor 488. Counterstain: phalloidin (Alexa 647, red), beta tubulin (Anti-beta III Tubulin Ab, Alexa 555, magenta) Hoechst (blue). (A) Phalloidin (B) Anti-beta III Tubulin Ab. (C) VGLUT1 Antibody. (D) Hoechst (E) Composite.



### Western Blotting

**Image 2.** Western Blot analysis of Rat brain membrane lysate showing detection of VGLUT1 protein using Mouse Anti-VGLUT1 Monoclonal Antibody, Clone S28-9. Primary Antibody: Mouse Anti-VGLUT1 Monoclonal Antibody at 1:1000.



### Immunocytochemistry

**Image 3.** Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-VGLUT1 Monoclonal Antibody, Clone S28-9 (ABIN2483725). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4 % PFA for 15 min. Primary Antibody: Mouse Anti-VGLUT1 Monoclonal Antibody (ABIN2483725) at 1:100 for overnight at 4 °C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain, Hoechst (blue) nuclear stain at 1:800, 1.6 mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) VGLUT1 Antibody (D) Composite.