

## Product datasheet for **TA328859**

### Slc32a1 Rabbit Polyclonal Antibody

#### Product data:

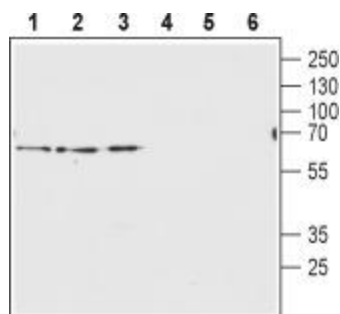
Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)GEFGGHDKPKITAW, corresponding to amino acid residues 106-120 of rat vesicular GABA transporter. Cytoplasmic, N-terminus
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN <sub>3</sub> .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	solute carrier family 32 member 1
Database Link:	<a href="#">NP_113970</a> <a href="#">Entrez Gene 22348 Mouse</a> <a href="#">Entrez Gene 140679 Human</a> <a href="#">Entrez Gene 83612 Rat</a> <a href="#">O35458</a>
Background:	The superfamily of amino acid transporters includes SLC32, SLC36 and SLC38 families. SLC32 has only one family member, the vesicular inhibitory amino acid transporter (VIAAT) or vesicular GABA transporter (VGAT). VGAT is responsible for the uptake of GABA and Glycine in exchange of protons, and their release from nerve terminals. The transporter is organized into ten membrane spanning domains, a cytosolic N-terminus and a luminal C-terminal tail. In many regions in the brain, where it is expressed, it is found constitutively phosphorylated, although the biological significance is currently unknown. VGAT is expressed on synaptic vesicles of GABAergic and glycinergic neurons. The transporter is also detected in the pituitary gland and in the pancreas.



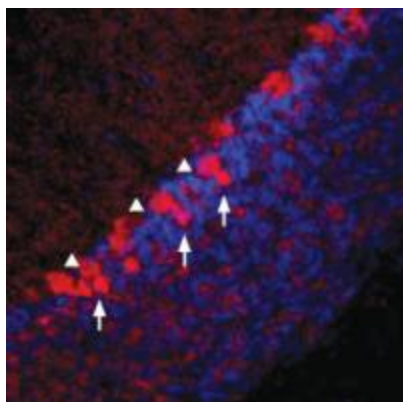
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**Synonyms:** bA122O1.1; hVIAAT; VGAT; VIAAT

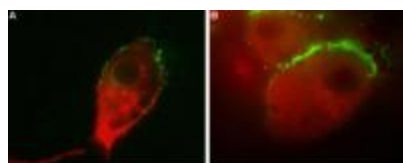
## Product images:



Western blot analysis of rat brain membranes (lanes 1 and 4), mouse brain membranes (lanes 2 and 5) and human U-87 MG glioblastoma lysates (lanes 3 and 6): 1-3. Anti-Vesicular GABA Transporter antibody, (1:200). 4-6. Anti-Vesicular GABA Transporter antibody, preincubated with the control peptide antigen.



Expression of Vesicular GABA Transporter in rat cerebellum. Immunohistochemical staining of rat frozen cerebellum sections using Anti-Vesicular GABA Transporter antibody, (1:100). VGAT staining is shown in red and dapi (blue) was used as a general cellular marker. VGAT appears in the cerebellar pinceau (arrows) and in the soma of Purkinje cells (triangles).



IHC staining of human glioblastoma U-87 MG. Extracellular staining of live intact cells with Anti-AMPA Receptor 1 (GluR1) (extracellular) antibody, (1:25), followed by goat anti-guinea pig-AlexaFluor-488 secondary antibody (green). Cells were subsequently fixed, permeabilized and labeled with Anti-Vesicular GABA Transporter antibody, (1:200), followed by goat anti-rabbit-AlexaFluor-594 secondary antibody (red).