

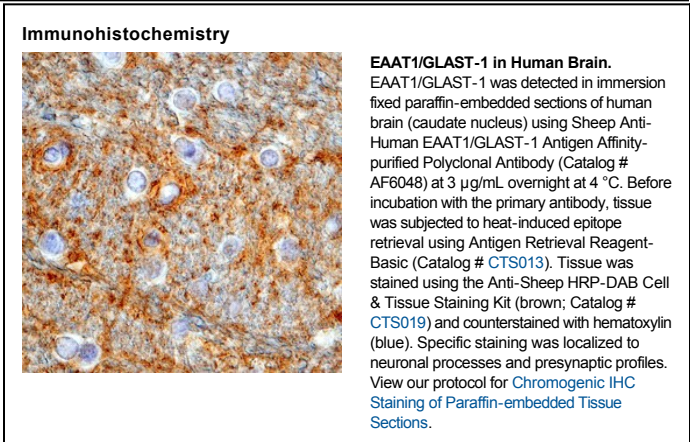
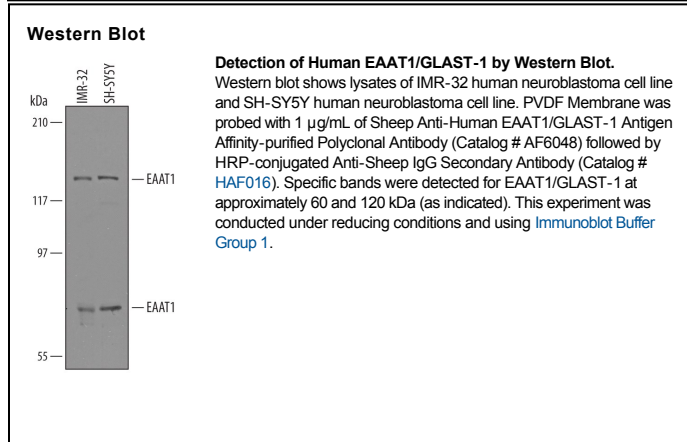
DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human EAAT1/GLAST-1 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human EAAT1/GLAST-1 His146-Ser237 Accession # P43003
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

GLAST-1 (Sodium dependent GLu/ASp Transporter 1; also SLC1A3 and EAAT1) is a 60-62 kDa member of the SDF symporter family of molecules. It is expressed by glia, fibroblasts, and select neuron cell types such as hippocampal neurons. EAAT1 is known to transport L-glutamate into glia, thus removing glutamate from synaptic areas where it either acts too long, or becomes toxic at elevated concentration. Its action is dependent on its ability to cotransport sodium. Human EAAT1 is a 542 amino acid (aa), 8-transmembrane variably glycosylated protein that contains N- and C-terminal cytoplasmic domains. Homodimers are reported to exist, but only when EAAT1 shows glycosylation. There are at least two potential isoform variants. One shows an Arg substitution for aa 430-475, while a second shows a four aa substitution for aa 62-542. Over an extracellular loop that encompasses aa 146-237, human EAAT1 shares 92% aa identity with mouse EAAT1.