Excitatory amino acid transporter 1 (EAAT1) is one of the two glial glutamate transporters that clear the extracellular glutamate generated during neuronal signal transmission. Excitatory amino acid transporters (EAATs) are membrane-bound proteins that are localized in glial cells and pre-synaptic glutamatergic nerve endings. EAATs transport the excitatory neurotransmitters L-glutamate and D-aspartate, a process that is essential for terminating the postsynaptic action of glutamate. The reuptake of amino acid neurotransmitters by EAAT proteins has been shown to protect neurons from excitotoxicity, which is caused by the accumulation of amino acid neurotransmitters. Three glutamate transporters have been identified in human brain, designated EAAT1-3. EAAT1 and EAAT3 are also expressed in various non-nervous tissues, while EAAT2 expression appears to be restricted to the brain. Surface expression of the glutamate transporter EAAT1 is stimulated by Insulin-like growth factor 1 through activation of phosphatidylinositol-3-kinase.

EAAT2 (E-1) is available conjugated to agarose (sc-365634 AC), 500 µg/mL agarose in 1 ml, for IP; to HRP (sc-365634 HRP), 200 µg/ml, for Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immuno-fluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of EAAT2: 70 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, U-87 MG cell lysate: sc-2411 or HT-1080 whole cell lysate: sc-364183.

EAAT2 (E-1) Alexa Fluor® 647: sc-365634 AF647. Direct fluorescent western blot analysis of EAAT2 expression in HT-1080 (A), SH-SY5Y (B) and U-87 MG (C) whole cell lysates and rat brain (D) and mouse brain (E) tissue extracts. Blocked with UltraCruz® Blocking Reagent: sc-51674. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker MW Tag-Alexa Fluor® 488: sc-516190.

EAAT2 (E-1): sc-365634. Immunofluorescence staining of methanol-fixed Hela cells showing membrane localization.