

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_004170.4
RefSeq Size:	3757 bp
RefSeq ORF:	1575 bp
Locus ID:	6505
UniProt ID:	P43005
Cytogenetics:	9p24.2
Domains:	SDF
Protein Families:	Druggable Genome, Transmembrane
MW:	57.1 kDa
Gene Summary:	This gene encodes a member of the high-affinity glutamate transporters that play an essential role in transporting glutamate across plasma membranes. In brain, these transporters are crucial in terminating the postsynaptic action of the neurotransmitter glutamate, and in maintaining extracellular glutamate concentrations below neurotoxic levels. This transporter also transports aspartate, and mutations in this gene are thought to cause dicarboxylic amino aciduria, also known as glutamate-aspartate transport defect. [provided by RefSeq, Mar 2010]