

Anti-HOME1 antibody



Description	Unconjugated Rabbit polyclonal to HOME1
Model	STJ190903
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Gene ID	9456
Gene Symbol	HOMER1
Dilution range	WB 1:500-2000 ELISA 1:5000-20000
Specificity	HOMER1 Polyclonal Antibody detects endogenous levels of protein.
Purification	HOMER1 antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Homer protein homolog 1 Homer-1
Molecular Weight	38 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.
Concentration	1 mg/ml

Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:17512OMIM:604798
Alternative Names	Homer protein homolog 1 Homer-1
Function	Postsynaptic density scaffolding protein. Binds and cross-links cytoplasmic regions of GRM1, GRM5, ITPR1, DNM3, RYR1, RYR2, SHANK1 and SHANK3. By physically linking GRM1 and GRM5 with ER-associated ITPR1 receptors, it aids the coupling of surface receptors to intracellular calcium release. May also couple GRM1 to PI3 kinase through its interaction with AGAP2. Isoform 1 regulates the trafficking and surface expression of GRM5. Isoform 3 acts as a natural dominant negative, in dynamic competition with constitutively expressed isoform 1 to regulate synaptic metabotropic glutamate function. Isoform 3, may be involved in the structural changes that occur at synapses during long-lasting neuronal plasticity and development.
Sequence and Domain Family	The WH1 domain interacts with the PPXXF motif in GRM1, GRM5, RYR1, RYR2, ITPR1, SHANK 1 and SHANK3.
Cellular Localization	Cytoplasm Cell junction, synapse, postsynaptic cell membrane, postsynaptic density Cell junction, synapse. Isoform 1 inhibits surface expression of GRM5 causing it to be retained in the endoplasmic reticulum.