## Recombinant human Homer protein homolog 1

Catalog No: #AP71801



Package Size: #AP71801-1 20ug #AP71801-2 100ug #AP71801-3 1mg

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Product Name	Recombinant human Homer protein homolog 1
Brief Description	Recombinant Protein
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-354aaSequence Info:Full Length
Accession No.	Q86YM7
Uniprot	Q86YM7
GeneID	9456;
Calculated MW	44.3 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	${\tt MGEQPIFSTRAHVFQIDPNTKKNWVPTSKHAVTVSYFYDSTRNVYRIISLDGSKAIINSTITPNMTFTKTSQKFG}$
	QWADSRANTVYGLGFSSEHHLSKFAEKFQEFKEAARLAKEKSQEKMELTSTPSQESAGGDLQSPLTPESING
	TDDERTPDVTQNSEPRAEPTQNALPFSHSSAISKHWEAELATLKGNNAKLTAALLESTANVKQWKQQLAAYQ
	EEAERLHKRVTELECVSSQANAVHTHKTELNQTIQELEETLKLKEEEIERLKQEIDNARELQEQRDSLTQKLQE
	VEIRNKDLEGQLSDLEQRLEKSQNEQEAFRNNLKTLLEILDGKIFELTELRDNLAKLLECS
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability
	of the protein itself.
	Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months
	at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for

## Background

Postsynaptic density scaffolding protein. Binds and cross-links Cytoplasmic domain 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.

## References

Homer regulates the association of group 1 metabotropic glutamate receptors with multivalent complexes of homer-related, synaptic proteins. Xiao B., Tu J.C., Petralia R.S., Yuan J.P., Doan A., Breder C.D., Ruggiero A., Lanahan A.A., Wenthold R.J., Worley P.F. Neuron 21:707-716(1998) Research Topic: Neuroscience

Note: This product is for in vitro research use only