

## Recombinant Homer1 Monoclonal Antibody

catalog number: **AN301556L**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

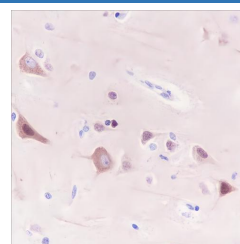
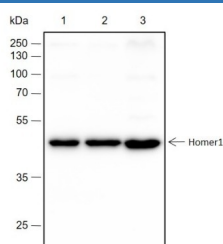
### Description

<b>Reactivity</b>	Human;Rat;Mouse
<b>Immunogen</b>	Recombinant human Homer1 fragment
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG, $\kappa$
<b>Clone</b>	A255
<b>Purification</b>	Protein A purified
<b>Buffer</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

### Applications

Applications	Recommended Dilution
<b>WB</b>	1:500-1:1000
<b>IHC</b>	1:200-1:1000

### Data



Western Blot with Homer1 Monoclonal Antibody at dilution of 1:1000. Lane 1: Mouse brain, Lane 2: Mouse hippocampus, Lane 3: Rat brain

**Observed-MW:46 kDa**

**Calculated-MW:41 kDa**

### Preparation & Storage

<b>Storage</b>	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
<b>Shipping</b>	Ice bag

### Background

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. Differentially regulates the functions of the calcium activated channel ryanodine receptors RYR1 and RYR2. Isoform 1 decreases the activity of RYR2, and increases the activity of RYR1, whereas isoform 5 counteracts the effects by competing for binding sites. Isoform 3 regulates the trafficking and surface expression of GRM5. Isoform 5 acts as a natural dominant negative, in dynamic competition with constitutively expressed isoform 1, isoform 2 and isoform 3 to regulate synaptic metabotropic glutamate function. Isoform 5, may be involved in the structural changes that occur at synapses during long-lasting neuronal plasticity and development.

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