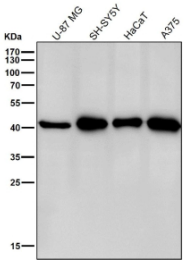
# CABP1 Antibody / Calcium binding protein 1 [clone 31C60] (FY12542)

| Catalog No. | Formulation | Size |
|---|---|---|
| FY12542 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA | 100 ul |

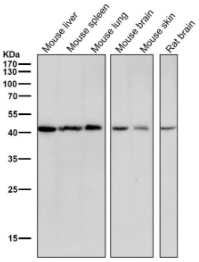
Recombinant RABBIT MONOCLONAL

**Bulk quote request**

| | |
|---|---|
| **Availability** | 2-3 weeks |
| **Species Reactivity** | Human, Mouse |
| **Format** | Liquid |
| **Clonality** | Recombinant Rabbit Monoclonal |
| **Isotype** | Rabbit IgG |
| **Clone Name** | 31C60 |
| **Purity** | Affinity-chromatography |
| **Buffer** | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA. |
| **UniProt** | Q9NZU7 |
| **Applications** | Immunofluorescence : 1:50-1:200<br>Immunocytochemistry/Western Blot : 1:500-1:2000 |
| **Limitations** | This CABP1 antibody is available for research use only. |




All lanes use the CABP1 antibody at 1:3K dilution for 1 hour at room temperature.

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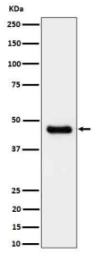
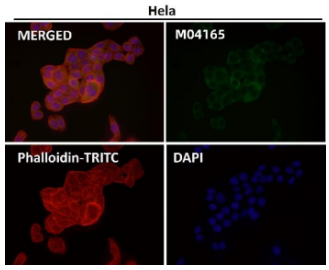



Western blot analysis of CABP expression in U-87 MG cell lysate using CABP1 antibody.




Immunofluorescent analysis using the CABP1 antibody at 1:50 dilution.

## Description

CABP1 antibody detects calcium binding protein 1, a neuronal calcium binding protein encoded by the CABP1 gene. CABP1 belongs to the calmodulin like protein family and contains EF hand domains that sense calcium signals. It regulates calcium channels, neurotransmitter release, and synaptic plasticity. CABP1 is predominantly expressed in brain and retina, where it modulates signaling events essential for neuronal communication and vision.

CABP1 antibody is widely used in neuroscience and sensory biology research. CABP1 interacts with L type calcium channels and inositol 1,4,5 triphosphate receptors, tuning calcium signaling in neurons. It plays roles in learning, memory, and synaptic adaptation. In the retina, CABP1 modulates photoreceptor signaling and contributes to visual processing. By detecting CABP1, researchers can evaluate how neuronal calcium sensors shape cellular signaling.

In western blot assays, CABP1 antibody detects protein bands corresponding to expected isoforms in neural tissue. Immunohistochemistry highlights expression in hippocampus and retina, while immunofluorescence reveals subcellular localization at synapses and dendrites. These methods support detailed analysis of calcium binding proteins in neurons.

Altered CABP1 expression has been linked to neurological disorders including schizophrenia and epilepsy, where calcium signaling is disrupted. CABP1 also influences neuronal excitability and response to stress, suggesting broader roles in neuroprotection. By applying CABP1 antibody, scientists can investigate how calcium sensors contribute to brain function and disease mechanisms.

CABP1 antibody from NSJ Bioreagents offers strong specificity for detecting calcium binding protein 1 across tissues. Its reliable performance across multiple applications ensures accurate results, supporting research into calcium regulation in neural signaling and vision.

## Application Notes

Optimal dilution of the CABP1 antibody should be determined by the researcher.

## Immunogen

A synthesized peptide derived from human CABP was used as the immunogen for the CABP1 antibody.

## Storage

Store the CABP1 antibody at -20oC.