

# CC2D1A Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP16254a

# **Specification**

# CC2D1A Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

# CC2D1A Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID 54862** 

#### **Other Names**

Coiled-coil and C2 domain-containing protein 1A, Akt kinase-interacting protein 1, Five prime repressor element under dual repression-binding protein 1, FRE under dual repression-binding protein 1, Freud-1, Putative NF-kappa-B-activating protein 023N, CC2D1A, AKI1

**Q6P1N0** 

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# CC2D1A Antibody (N-term) Blocking Peptide - Protein Information

Name CC2D1A

Synonyms AKI1, LGD2 {ECO:0000305}

# **Function**

Transcription factor that binds specifically to the DRE (dual repressor element) and represses HTR1A gene transcription in neuronal cells. The combination of calcium and ATP specifically inactivates the binding with FRE. May play a role in the altered regulation of HTR1A associated with anxiety and major depression. Mediates HDAC-independent repression of HTR1A promoter in neuronal cell. Performs essential function in controlling functional maturation of synapses (By similarity). Plays distinct roles depending on its localization. When cytoplasmic, acts as a scaffold protein in the PI3K/PDK1/AKT pathway. Repressor of HTR1A when nuclear. In the centrosome, regulates spindle pole localization of the cohesin subunit SCC1/RAD21, thereby mediating centriole cohesion during mitosis.

# **Cellular Location**

Cytoplasm. Nucleus {ECO:0000250|UniProtKB:Q66HA5}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome



# CC2D1A Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

### Blocking Peptides

CC2D1A Antibody (N-term) Blocking Peptide - Images

# CC2D1A Antibody (N-term) Blocking Peptide - Background

CC2D1A is a transcriptional repressor that bindsto a conserved 14-bp 5'-repressor element and regulates expression the 5-hydroxytryptamine (serotonin) receptor 1A gene in neuronalcells. The DNA binding and transcriptional repressor activities of the protein are inhibited by calcium. A mutation in this generesults in nonsyndromic mental retardation-3.

# CC2D1A Antibody (N-term) Blocking Peptide - References

Zhao, M., et al. J. Biol. Chem. 285(32):24372-24380(2010)Nakamura, A., et al. Biochem. Biophys. Res. Commun. 393(4):872-876(2010)Nakamura, A., et al. J. Cell Biol. 187(5):607-614(2009)McKay, G.J., et al. Invest. Ophthalmol. Vis. Sci. 50(2):533-539(2009)Rogaeva, A., et al. Eur. J. Neurosci. 26(4):965-974(2007)