

KD-Validated Anti-CC2D1A Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI1147

Specification

KD-Validated Anti-CC2D1A Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW	WB, FC <u>O6P1N0</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 104 kDa , observed, 130 kDa KDa
Gene Name Aliases	CC2D1A CC2D1A; Coiled-Coil And C2 Domain Containing 1A; Five Prime Repressor Element Under Dual; Repression-Binding Protein 1; Akt Kinase-Interacting Protein 1; MRT3; TAPE; Coiled-Coil And C2 Domain-Containing Protein 1A; FRE Under Dual Repression-Binding Protein 1; Putative NF-Kappa-B-Activating Protein 023N; TBK1-Associated Protein In Endolysosomes 2; Lethal (2) Giant Discs Homolog 2; FLJ20241; Freud-1; FREUD-1; Aki-1; Lgd2; Five Repressor Element Under Dual Repression-Binding Protein 1; Mental Retardation, Nonsyndromic, Autosomal
Immunogen	Recessive, 3; Putative NFkB Activating Protein; Freud-1/Aki1; AKI-1; LGD2; AKI1 A synthesized peptide derived from CC2D1A

KD-Validated Anti-CC2D1A Rabbit Monoclonal Antibody - Additional Information

Gene ID 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, LGD2 {ECO:0000305}

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KD-Validated Anti-CC2D1A Rabbit Monoclonal Antibody - 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

KD-Validated Anti-CC2D1A Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KD-Validated Anti-CC2D1A Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-CC2D1A antibody (Cat#AGI1147). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-CC2D1A antibody (Cat#AGI1147, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-CC2D1A antibody (Cat#AGI1147). CC2D1A expression in wild type (WT) and CC2D1A shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-CC2D1A antibody (Cat#AGI1147, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of CC2D1A expression in C2C12 cells using CC2D1A antibody (Cat#AGI1147, 1:2,000). Green, isotype control; red, CC2D1A.