



Rabbit Anti-CDON antibody

SL12323R

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| Product Name: | CDON |
| Chinese Name: | Cell adhesion molecule相关蛋白/癌基因下调蛋白抗体 |
| Alias: | CDO; CDON; Cell adhesion molecule-related/down-regulated by oncogenes; CDON_HUMAN. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Mouse,Rat,Dog,Cow,Rabbit,Sheep, |
| Applications: | ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 136kDa |
| Cellular localization: | The cell membrane |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human CDON:101-200/1287<Extracellular> |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| PubMed: | PubMed |
| Product Detail: | Cell adhesion molecule-related/down-regulated by oncogenes (CDO) and BOC (brother of CDO) are members of the immunoglobulin/fibronectin type III repeat family and act as cell surface receptors. CDO is a component of a cell-surface receptor complex which also contains BOC, NEO1, CTNNB1 and cadherins and which acts as a mediator of cell-cell interactions between muscle cells. CDO and BOC are single pass membrane |

proteins that play a role in myogenic cell differentiation. Together, CDO and BOC participate in a positive feedback loop with MyoD, a myogenic transcription factor. The 1,242 amino acid rat CDO protein has a 24 residue signal sequence, five Ig V-like repeats, a 25 residue membrane-spanning region, three FNIII-like repeats and a cytoplasmic region of 256 amino acids containing a proline-rich stretch. The human protein contains 1,225 amino acid residues and shares significant homology with the domain structures of the rat protein.

Function:

CDON (Cdo), which is implicated in myogenesis also has a role in human forebrain development. Holoprosencephaly (HPE), a common defect of human forebrain development, is associated with haploinsufficiency for genes encoding Sonic Hedgehog (SHH) pathway components. Cdo positively regulates SHH in multiple ways, including at signal reception and via a parallel mechanism required at the level of Gli transcription factors. Specific Cdo domains required for its promyogenic effect are dispensable for its Shh signaling role, suggesting that Cdo has multiple, independent functions.

Subunit:

Part of a complex that contains BOC, CDON, NEO1, cadherins and CTNNB1. Interacts with NTN3 (By similarity). Interacts with PTCH1 (By similarity). Interacts with GAS1 (By similarity).

Subcellular Location:

Cell Membrane

Post-translational modifications:

N-glycosylated (By similarity).

DISEASE:

Defects in CDON are the cause of holoprosencephaly type 11 (HPE11) [MIM:614226]. HPE11 is a structural anomaly of the brain, in which the developing forebrain fails to correctly separate into right and left hemispheres. Holoprosencephaly is genetically heterogeneous and associated with several distinct facies and phenotypic variability.

Similarity:

Contains 3 fibronectin type-III domains.

Contains 5 Ig-like C2-type (immunoglobulin-like) domains.

SWISS:

Q4KMG0

Gene ID:

50937

Database links:

[Entrez Gene: 50937](#)Human

[Omid: 608707](#)Human

[SwissProt: Q4KMG0](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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