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COBL Rabbit pAb

Catalog # AP97671

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	O75128
Other Accession	O75128
Predicted	Rat, Human, Mouse, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	135617
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human COBL
Epitope Specificity	181-280/1261
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 3 WH2 domains.
SUBUNIT	Identified in a complex composed of ACTA1, COBL, GSN AND TMSB4X. Interacts (via WH2 domains) with actin monomers. Interacts with both PACSIN1 and DBNL. Identified in a complex composed of COBL, PACSIN1 and WASL. Interacts with PACSIN1, PACSIN2 and PACSIN3 (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Cordon-bleu, also known as COBL, is a 1,261 amino acid protein that localizes to the node of the axial midline, a structure that organizes morphogenesis of the vertebrate embryo. Widely conserved and existing as five alternatively spliced isoforms, Cordon-bleu interacts with Vangl2 to mediate closure of the midbrain neural tube and is highly expressed in pancreas, ovary, brain, liver, lung and kidney. Cordon-bleu contains three WH2 domains and is encoded by a gene that maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to Osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance.

Additional Information

Gene ID	23242
Other Names	COBL_HUMAN; COBL; KIAA0633; COBL_MOUSE; cordon-bleu WH2 repeat protein; cordon-bleu homolog (mouse)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	COBL
Synonyms	KIAA0633
Function	Plays an important role in the reorganization of the actin cytoskeleton. Regulates neuron morphogenesis and increases branching of axons and dendrites. Regulates dendrite branching in Purkinje cells (By similarity). Binds to and sequesters actin monomers (G actin). Nucleates actin polymerization by assembling three actin monomers in cross-filament orientation and thereby promotes growth of actin filaments at the barbed end. Can also mediate actin depolymerization at barbed ends and severing of actin filaments. Promotes formation of cell ruffles.
Cellular Location	Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton. Cell projection, ruffle Cytoplasm. Note=Recruited to the cell membrane via interaction with PACSIN1. Colocalizes with the actin cytoskeleton Detected throughout the neuron cell body, as well as in axons and dendrites (By similarity).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.