

Protein BOC Rabbit pAb

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Catalog # AP54823

Product Information

Primary Accession	Q9BWV1
Predicted	Rat, Pig, Dog, Human, Mouse, Zebrafish, Chicken, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	121059
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Protein BOC
Epitope Specificity	451-550/1114
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Single pass type I membrane protein. Note: Enriched at sites of cell-cell contact.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	BOC is a receptor-like, single pass membrane protein belonging to the cell surface molecule subfamily of the Immunoglobulin/fibronectin type-III repeat family within the immunoglobulin superfamily. It contains three fibronectin type-III domains and four Immunoglobulin-like C2-type domains in its extracellular region. The intracellular region of BOC is not required for proper function. BOC localizes to the cell membrane and is ubiquitously expressed with highest expression levels in skeletal muscle and small intestine. Its mRNA expression is down-regulated by Ras. BOC is involved in accelerating myoblast differentiation and is dependent on CDO for its activity. BOC and CDO are co-expressed in muscle precursors and are components of a receptor complex that mediates cell-cell interactions important in myogenesis. Overexpression of BOC results in enhanced differentiation of myoblast cells. In addition, BOC is a target and signaling component of the Shh pathway.

Additional Information

Gene ID	91653
Other Names	Brother of CDO, Protein BOC, BOC
Dilution	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	BOC {ECO:0000303 PubMed:11782431, ECO:0000312 HGNC:HGNC:17173}
Function	Together with CDON, forms a coreceptor required for sonic hedgehog (SHH) handoff to its patched receptor (PTCH1 or PTCH2), thereby allowing activation of the smoothened signaling pathway (By similarity). Binds to the dually lipid-modified Sonic hedgehog protein N-product (ShhN) downstream of SCUBE2 carrier and promotes its release to GAS1 (By similarity). ShhN is then directly transferred to patched receptor by GAS1 (By similarity). May also mediate cell-cell interactions between muscle precursor cells, promoting differentiation of myogenic cells (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Note=Enriched at sites of cell-cell contact.
Tissue Location	Detected in skeletal muscle, heart, thymus, kidney and small intestine. Detected at lower levels in brain, placenta, lung and colon mucosa.

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