

# BOC (C-17)-R: sc-51258-R

## BACKGROUND

BOC (brother of CDO precursor) 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 downregulated by Ras. BOC is involved in accelerating myoblast differentiation and is dependent on CDO for its activity. BOC and CDO are coexpressed 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.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: BOC (human) mapping to 3q13.2; Boc (mouse) mapping to 16 B5.

## SOURCE

BOC (C-17)-R is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of BOC of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-51258 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

BOC (C-17)-R is recommended for detection of BOC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

BOC (C-17)-R is also recommended for detection of BOC in additional species, including equine.

Suitable for use as control antibody for BOC siRNA (h): sc-72161, BOC siRNA (m): sc-72162, BOC shRNA Plasmid (h): sc-72161-SH, BOC shRNA Plasmid (m): sc-72162-SH, BOC shRNA (h) Lentiviral Particles: sc-72161-V and BOC shRNA (m) Lentiviral Particles: sc-72162-V.

Molecular Weight of BOC: 121 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.