

cerberus (A-20): sc-15132

BACKGROUND

The cerberus (Cer1, Cer-1 or Cerr) protein is a member of the cysteine knot superfamily and is expressed in anterior regions of the gastrula. Cerberus induces the differentiation of structural components in the head during embryonic development. A segmental pattern of expression of cerberus is also observed in nascent and newly formed somites. This suggests an additional role in development of the axial skeleton, musculature and peripheral nervous system. Cerberus is secreted and functions in the surrounding extracellular space by inhibiting signaling molecules. The neural-inducing and mesoderm-inhibiting activities of cerberus result from specific binding of cerberus to BMP and Nodal molecules, respectively. In mouse, cerberus is expressed in the anterior mesendoderm that underlies the presumptive anterior neural plate.

REFERENCES

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3. Belo, J.A., Bachiller, D., Agius, E., Kemp, C., Borges, A.C., Marques, S., Piccolo, S. and De Robertis, E.M. 2000. Cerberus-like is a secreted BMP and nodal antagonist not essential for mouse development. *Genesis* 26: 265-270.
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5. Bachiller, D., Klingensmith, J., Kemp, C., Belo, J.A., Anderson, R.M., May, S.R., McMahon, J.A., McMahon, A.P., Harland, R.M., Rossant, J. and De Robertis, E.M. 2000. The organizer factors Chordin and Noggin are required for mouse forebrain development. *Nature* 403: 658-661.

SOURCE

cerberus (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of cerberus 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-15132 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

cerberus (A-20) is recommended for detection of cerberus of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for cerberus siRNA (h): sc-39406, cerberus siRNA (m): sc-39407, cerberus shRNA Plasmid (h): sc-39406-SH, cerberus shRNA Plasmid (m): sc-39407-SH, cerberus shRNA (h) Lentiviral Particles: sc-39406-V and cerberus shRNA (m) Lentiviral Particles: sc-39407-V.

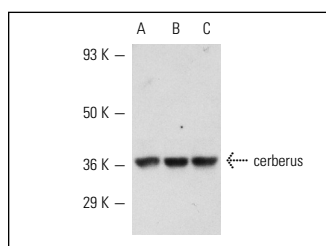
Molecular Weight of cerberus: 38 kDa.

Positive Controls: Saos-2 cell lysate: sc-2235, Hs68 cell lysate: sc-2230 or FHs 173We cell lysate: sc-2417.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



cerberus (A-20): sc-15132. Western blot analysis of cerberus expression in Saos-2 (A), Hs68 (B) and FHs 173We (C) whole cell lysates.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **cerberus (C-1): sc-515324**, our highly recommended monoclonal alternative to cerberus (A-20).