



CRB2 (W-13): sc-107192

BACKGROUND

CRB2 (crumbs homolog 2) is a 1,285 amino acid protein that contains three laminin G-like domains and 15 EGF-like domains and exists as multiple alternatively spliced isoforms that are either secreted or membrane bound. Expressed in kidney and retina, as well as in fetal eye and brain, CRB2 is thought to play a role in the morphogenesis of polarized cells and may be involved in DNA repair. Defects in the gene encoding CRB2 are associated with the pathogenesis of autosomal recessive retinitis pigmentosa (RP) and Leber congenital amaurosis (LCA), the former of which refers to a group of diseases that lead to the degeneration of retinal photoreceptor cells, ultimately resulting in a loss of vision. The gene encoding CRB2 maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome.

REFERENCES

1. Crostella, L., Lidder, S., Williams, R. and Skouteris, G.G. 2001. Hepatocyte Growth Factor/scatter factor-induces phosphorylation of cortactin in A431 cells in a Src kinase-independent manner. *Oncogene*. 20: 3735-3745.
2. Katoh, M. and Katoh, M. 2004. Identification and characterization of Crumbs homolog 2 gene at human chromosome 9q33.3. *Int. J. Oncol.* 24: 743-749.
3. van den Hurk, J.A., Rashbass, P., Roepman, R., Davis, J., Voeselek, K.E., Arends, M.L., Zonneveld, M.N., van Roekel, M.H., Cameron, K., Rohrschneider, K., Heckenlively, J.R., Koenekoop, R.K., Hoyng, C.B., Cremers, F.P. and den Hollander, A.I. 2005. Characterization of the Crumbs homolog 2 (CRB2) gene and analysis of its role in retinitis pigmentosa and Leber congenital amaurosis. *Mol. Vis.* 11: 263-273.
4. Online Mendelian Inheritance in Man, OMIM™. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609720. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Botuyan, M.V., Lee, J., Ward, I.M., Kim, J.E., Thompson, J.R., Chen, J. and Mer, G. 2006. Structural basis for the methylation state-specific recognition of histone H4-K20 by 53BP1 and Crb2 in DNA repair. *Cell*. 127: 1361-1373.
6. Pardossi-Piquard, R., Chen, F., Silva-Gagliardi, N.F., Szego, M., McInnes, R., McGlade, C.J., St. George-Hyslop, P. and Fraser, P.E. 2007. Overexpression of human CRB1 or related isoforms, CRB2 and CRB3, does not regulate the human presenilin complex in culture cells. *Biochemistry*. 46: 13704-13710.

CHROMOSOMAL LOCATION

Genetic locus: *Crb2* (mouse) mapping to 2 B.

SOURCE

CRB2 (W-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CRB2 of mouse origin.

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.

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-107192 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CRB2 (W-13) is recommended for detection of CRB2 of mouse and rat 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); non cross-reactive with family members CRB1 or CRB3.

Suitable for use as control antibody for CRB2 siRNA (m): sc-142560, CRB2 shRNA Plasmid (m): sc-142560-SH and CRB2 shRNA (m) Lentiviral Particles: sc-142560-V.

Molecular Weight of CRB2: 134 kDa.

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) 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.

RESEARCH USE

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