

Crry (E-15): sc-17715

BACKGROUND

Human membrane cofactor protein (MCP), also designated CD46, is a widely distributed complement regulator. In mouse, expression of MCP is largely restricted to testis, while a related widely expressed protein (Crry) appears to perform the regulatory activity of MCP. Crry (for murine complement receptor-related gene Y), protects the body from damage inflicted by inflammation and modulates renal interstitial disease induced by proteinuria. A functional ortholog of human decay-accelerating factor (DAF, CD55) and membrane cofactor protein (MCP, CD46), Crry protects cells from homologous complement by inhibiting the complement proteins C3 and C4 convertases from marking foreign cells for destruction. Sequence analysis suggests that Crry may be the mouse genetic homolog of the CD35 antigen encoded by the human gene CR1. Manipulation of Crry may play a role in treating central nervous conditions such as traumatic brain injury or stroke. Deletion of the gene encoding Crry may play a role in miscarriages.

REFERENCES

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2. Aslam, M., et al. 2003. The extended multidomain solution structures of the complement protein Crry and its chimeric conjugate Crry-Ig by scattering, analytical ultracentrifugation and constrained modelling: implications for function and therapy. *J. Mol. Biol.* 329: 525-550.
3. Lee, Y.L., et al. 2004. The embryotrophic activity of oviductal cell-derived complement C3b and iC3b, a novel function of complement protein in reproduction. *J. Biol. Chem.* 279: 12763-12768.
4. Muhlfeld, A.S., et al. 2004. Overexpression of complement inhibitor Crry does not prevent cryoglobulin-associated membranoproliferative glomerulonephritis. *Kidney Int.* 65: 1214-1223.
5. Gelderman, K.A., et al. 2004. Tumor-specific inhibition of membrane-bound complement regulatory protein Crry with bispecific monoclonal antibodies prevents tumor outgrowth in a rat colorectal cancer lung metastases model. *Cancer Res.* 64: 4366-4372.
6. Ohta, R., et al. 2004. Mouse complement receptor-related gene y/p65-neutralized tumor vaccine induces antitumor activity *in vivo*. *J. Immunol.* 173: 205-213.

SOURCE

Crry (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Crry of rat 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-17715 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Crry (E-15) is recommended for detection of Crry of rat 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).

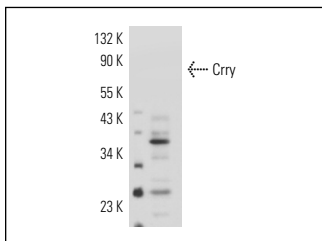
Molecular Weight of Crry isoforms: 53/65/80 kDa.

Positive Controls: rat kidney extract: sc-2394, rat spleen extract: sc-2397 or rat liver extract: sc-2395.

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



Crry (E-15): sc-17715. Western blot analysis of Crry expression in rat spleen tissue extract.

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.

MONOS
Satisfaction
Guaranteed

Try **Crry (TLD-1C11): sc-53530**, our highly recommended monoclonal alternative to Crry (E-15).