

MCR (C-19): sc-6861

BACKGROUND

Mineralocorticoid hormones are primarily found in epithelial tissues where they function as regulators of Na⁺, K⁺ and H⁺ ion transport. Aldosterone is a mineralocorticoid that has been shown to regulate electrolyte excretion and intravascular volume and is therefore involved in blood pressure regulation. Mineralocorticoid receptor (MCR or MR) is a member of the steroid/thyroid/retinoic nuclear hormone receptor superfamily that has been shown to activate gene transcription in response to aldosterone binding. Regulation of the mineralocorticoid receptors occurs through either receptor downregulation (negative autoregulation) or hormone-mediated upregulation (positive autoregulation). MCR association with HSP 90 appears to be required for hormone binding to MCR and subsequent MCR activation.

CHROMOSOMAL LOCATION

Genetic locus: NR3C2 (human) mapping to 4q31.23; Nr3c2 (mouse) mapping to 8 C1.

SOURCE

MCR (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MCR 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-6861 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-6861 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MCR (C-19) is recommended for detection of MCR 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MCR (C-19) is also recommended for detection of MCR in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MCR siRNA (h): sc-38836, MCR siRNA (m): sc-38837, MCR shRNA Plasmid (h): sc-38836-SH, MCR shRNA Plasmid (m): sc-38837-SH, MCR shRNA (h) Lentiviral Particles: sc-38836-V and MCR shRNA (m) Lentiviral Particles: sc-38837-V.

MCR (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MCR: 102 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

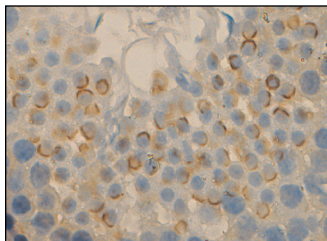
STORAGE

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.

DATA



MCR (C-19): sc-6861. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse testis tissue showing nuclear envelope localization.

SELECT PRODUCT CITATIONS

1. Iida, T., et al. 2000. Functional modulation of the mineralocorticoid receptor by *cis*-diamminedichloroplatinum (II). *Kidney Int.* 58: 1450-1460.
2. Amin, M.S., et al. 2005. Distribution of epithelial sodium channels and mineralocorticoid receptors in cardiovascular regulatory centers in rat brain. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 289: R1787-R1797.
3. Dovio, A., et al. 2009. Differential expression of determinants of glucocorticoid sensitivity in androgen-dependent and androgen-independent human prostate cancer cell lines. *J. Steroid Biochem. Mol. Biol.* 116: 29-36.
4. Chan, S.K., et al. 2010. Corticosteroid-induced kidney dysmorphogenesis is associated with deregulated expression of known cystogenic molecules, as well as Indian hedgehog. *Am. J. Physiol. Renal Physiol.* 298: F346-F356.
5. Urbanet, R., et al. 2010. Analysis of Insulin sensitivity in adipose tissue of patients with primary aldosteronism. *J. Clin. Endocrinol. Metab.* 95: 4037-4042.
6. Proszkowiec-Weglarz, M., et al. 2010. Functional characterization of chicken glucocorticoid and mineralocorticoid receptors. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 298: R1257-R1268.

PROTOCOLS

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



Try **MCR (H10E4C9F): sc-53000**, our highly recommended monoclonal alternative to MCR (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **MCR (H10E4C9F): sc-53000**.