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Product Specification Sheet

Melanocortin Receptor 3 (MC3-R) Antibodies

Cat. # MCR32-S	Rabbit Anti-Mouse MC3-R Antiserum # 2	**SIZE:** 100 ul
Cat. # MCR32-A	Rabbit Anti-Mouse MC3-R IgG# 2 (aff pure)	**SIZE:** 100 ug
Cat. # MCR32-P	Mouse MC3-R Control peptide #2	**SIZE**: 100 ug

Melanocortins are regulatory peptides formed by post-translational processing of pro-opiomelanocortin. Melanocortin peptides have been suggested to perform a variety of physiological roles ranging from control of behavior, memory, neurotrophic properties, antipyretic and modulation of immune system, etc. Their binding sites have been found distributed in tissues ranging from lachrymal and submandibular glands, pancreas, adipose tissue, bladder, duodenum, spleen, brain, gonadal tissues and malignant melanoma tumors. Five melanocortin receptors (MC-R) have been characterized to date. These include melanocyte-specific receptor (MSH or MC1-R), corticoaderenal-specific ACTH receptor (MC2-R), melacortin-3 (MC3-R), melanocortin-4 (MC4-R) and melanocortin-5 receptor (MC5-R). MC3-R and MC4-R are distributed in brain whereas MC5-R has a broad distribution. Melanocortin-3 receptor (MC3-R) is expressed in brain. In humans it is a 360 AA protein whereas in mice and rats its 323 AA.

Source of Antigen and Antibodies

Antigen	18-aa peptide of Mouse MC3-R; (Gene Accession #P33033) **Designated (MCR32-P or control peptide/blocking peptide**) conjugated to KLH
Location	~C-terminus, Cytoplasmic domain
Ab Host/type	Rabbit, Polyclonal unpurified antiserum (#**MCR32**-S) and IgG, purified over antigen-agarose (Cat # **MCR32**-A)
2-Ab	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)
100ul solution lyophilized powder
Supplied in Buffer: 0.05% azide
Reconstitute powder in 100 ul PBS

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer**: PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide
100 ug/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder

Recommended Usage

Western Blotting (1:1K-5K for neat serum and 1-10 ug/ml for affinity pure using Chemiluminescence technique).

ELISA (1:10K-1:100K; using 50-100 ng of control peptide/well).

Histochemistry & Immunofluorescence: We recommend the use of affinity purified antibody at 2-20 ug/ml ((see published refs using this antibody in 2).

Specificity & Cross-reactivity

The 18 AA mouse MCR31-P is 83% homologous with rat and human MC3-R and 77% with sheep MC3-R. ADI has another antibody that is made to the human MC3-R sequence (MCR31-S). antibody crossreactivity in various species is not established. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at: www.4adi.com\data\abblock.html).

General References: Gantz I (1993) JBC 268, 8246; Desarnaud F et al (1994) Bichem J 299, 367-373; Roselli-Rehfuss L (1993) PNAS 90, 8856; (

(2) Citations of ADI's Antibodies (see web site for updated list)

Lindqvist N, 2003 Eur. J. Pharmacol. 482, 85-94, IHC

*This product is for *in vitro* research use only.

MCR32-S-A-P 50329A

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