SANTA CRUZ BIOTECHNOLOGY, INC.

NMBR (H-55): sc-98251

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The bombesin receptor family includes the gastrin-releasing peptide (GRPR) and neuromedin B (NMBR) receptors. Both receptors are expressed in various brain regions and in the digestive tract. NMBR belongs to the G protein-coupled receptor 1 family. The gene encoding NMBR protein maps to chromosome 6q24.1. NMBR, an integral membrane protein, binds neuromedin B, a mitogen and growth factor for gastrointestinal epithelial tissue and normal and neoplastic lung.

REFERENCES

1. Siegfried, J.M., et al. 1999. Evidence for autocrine actions of neuromedin B and gastrin-releasing peptide in non-small cell lung cancer. Pulm. Pharmacol. Ther. 12: 291-302.
2. Sun, B., et al. 2000. The presence of receptors for bombesin/GRP and mRNA for three receptor subtypes in human ovarian epithelial cancers. Regul. Pept. 90: 77-84.
3. Shuttleworth, S.J., et al. 2004. Identification and optimization of novel partial agonists of neuromedin B receptor using parallel synthesis. Bioorg. Med. Chem. Lett. 14: 3037-3042.
4. Marvanova, M., et al. 2004. Identification of genes regulated by memantine and MK-801 in adult rat brain by cDNA microarray analysis. Neuropsychopharmacology 29: 1070-1079.
5. Shan, L., et al. 2004. Bombesin-like peptide receptor gene expression, regulation and function in fetal murine lung. Am. J. Physiol. Lung Cell Mol. Physiol. 286: L165-L173.

CHROMOSOMAL LOCATION

Genetic locus: NMBR (human) mapping to 6q24.1.

SOURCE

NMBR (H-55) is a rabbit polyclonal antibody raised against amino acids 1-55 mapping at the N-terminus of NMBR 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.

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.

PROTOCOLS

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

APPLICATIONS

NMBR (H-55) is recommended for detection of Neuromedin B receptor of 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 NMBR siRNA (h): sc-45362, NMBR shRNA Plasmid (h): sc-45362-SH and NMBR shRNA (h) Lentiviral Particles: sc-45362-V.

Molecular Weight of glycosylated NMBR: 47-80 kDa.

Molecular Weight of deglycosylated NMBR: 43 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.