ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

NMU Receptor 2 (NMUR2) Antibodies

Cat # NMUR21-S	Rabbit Anti-Human NMUR2 antiserum # 1	SIZE: 100 ul
Cat # NMUR21-A	Rabbit Anti-Human NMUR2 IgG # 1 (aff pure)	SIZE: 100 ug
Cat # NMUR21-P	Human NMUR2 Control/blocking peptide # 1	SIZE: 100 ug

The neuromedins (**Nm**) are a family of bioactive peptides best known for their roles in smooth muscle contraction. Nm family of bioactive peptides include: Bombesin-like (NmB, NmC), kassinin-like (NmL and NmK or neurokinins A and B), neurotensin-like (NmN), and neuromedin U (NmU; for its ability to stimulate *u*terine muscle contraction). Besides its roles in smooth muscle contraction (human ileum, urinary bladder, rat stomach etc), NmU has also been implicated in hypertension, blood flow in intestine, and neurotransmission. Recently two structurally related, orphan G-protein coupled receptors, termed **NMUR1 (GPCR66/FM-3/SNORF62**) and **NMUR2 (TGR-1/FM-4/SNORF72),** have been identified as cognate receptors of NmU. NMU receptors display a typical 7 TM domains with extracellular N-terminus and intracellular C-terminus.

Source of Antigen and Antibodies

Antigen	A 16-aa peptide (designated **NMUR21-P or control peptide**) mapping at the **extracellular**, N-terminal domain or **human NMUR2, and** a 20 AA peptide (designated **NMUR22-P or control peptide**) within the **cytoplasmic**, C-terminal domain of **rat NMUR21** were synthesized, coupled to KLH
Ab Host/type	Rabbit, Polyclonal antiserum # **NMUR21**-S and IgG, purified over antigen-agarose (Cat # **NMUR21**-A)
2-Ab	Cat # 20320, goat anti-rabbit IgG- HRP (AP, biotin, FITC conjugates also available).
-ve control IgG	Cat # 20009-1, Rabbit (non-immune) Serum IgG, purified, suitable for ELISA, Western, IHC as –ve control

Form & Storage of Antibodies/Peptide Control

Antiserum (unpurified)
100 ul Solution Lyophilized
Supplied 0.1% azide, **Reconstitute** powder in 100 ul PBS

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

Control/blocking peptide
100 ug/100 ul Solution Lyophilized
Supplied in Buffer: PBS pH 7.5
Reconstitute powder in PBS at 1 mg/ml

Storage

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

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

Stability: 6-12 months at -20°C or below.
Shipping: 4°C 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).Not tested

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

Histochemistry & Immunofluorescence: Not tested. we recommend the use of affinity purified antibody at 2-20 ug/ml in formaldehyde fixed tissue.

Specificity & Cross-reactivity

The 16-aa human NMUR21-P sequence is 85% conserved in mouse and rat NMUR2. No significant sequence homology exist with NMUR1 or Ghrelin receptors or other proteins. Antibody cross- reactivity in various species has not been studied. 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 see detailed protocol at the web site).

General References: (1) Howard AD et al (2000) Nature 406, 70; Fuji R et al (2000) JBC 275, 21068; Raddatz R et al (2000) JBC 275, 32452; Shan L et al (2000) JBC 275, 39482; Hosoya M et al (2000) JBC 275, 29528; Szekeres PG et al (2000) JBC 275, 20247.

*This product is for in vitro research use only.

Some New Antibodies from ADI…

Neuromedin U, NMUR1/2; Neurotensin, Ghrelin, Orexin receptors, CART, and Leptin receptors

Western Blot recycling kit (Use the same blot to probe with multiple antibodies) **recycle blot in 5-10 min.**

NMUR21-S-A-P rev. 210112AC

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