

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 uterine 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**

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

100ul solution lyophilized powder  
Supplied 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 -200C 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** (1:100K; 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 71212A

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