

PRODUCT DATA SHEET

Bioworld Technology CO., Ltd.



NPY2-R (D42) Peptide

Cat No.: BS2818P

Background

A gene on chromosome 4q31 encodes a 381 amino acid protein, NPY2-R (also designated Neuropeptide Y receptor Y2). NPY2-R is a member of the Gprotein-coupled receptor super-family, and like other members has seven putative transmembrane domains. However, NPY2-R gene consists of two exons, unlike the contiguous structure of other G-protein-coupled receptor genes. NPY2-R shares a 31% sequence identity with NPY1-R. NPY2-R is expressed in the presynaptic membranes of the central nervous system, and to a lesser extent the peripheral nervous system. NPY2-R associates (from highest to lowest affinity) with carboxyl terminals of unphosphorylated Peptide YY (PYY) (phosphorylation of PYY greatly reduces its binding affinity), NPY, and Pancreatic Peptide. Depending on the cell type, NPY2-R couples with different G proteins, which act as different second messengers. NPY2-R reduces the effects of depolarization, calcium ion currents in arterial smooth muscle by through association with NPY. NPY2-R inhibits cholecystokinin octapeptide-induced, esophageal muscle contraction, through interactions with PYY and NPY.

Swiss-Prot

P49146

Applications

Blocking

Specificity

This peptide can be used with studies using BS2818 NPY2-R (D42) pAb.

Purification & Purity

Synthetic peptide NPY2-R (D42). (Note: the amino acid sequence is proprietary). The purity is > 98%.

Product

1 mg/ml in DI water.

Storage & Stability

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Research Use

For research use only, not for use in diagnostic procedure.