

NPSR1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54498

Specification

NPSR1 Polyclonal Antibody - Product Information

Application Primary Accession

Reactivity
Host
Clonality
Calculated MW
Physical State
Immunogen

Epitope Specificity

Isotype **Purity**

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

SUBCELLULAR LOCATION Proclin300 and 50% Glycerol.

Cell Membrane and Cytoplasmic

SIMILARITY

Belongs to the G-protein coupled receptor

1 family. Vasopressin/oxytocin receptor

subfamily.

DISEASE Defects in NPSR1 are a cause of

asthma-related traits type 2 (ASRT2) [MIM:608584]. Asthma-related traits include clinical symptoms of asthma, such as coughing, wheezing, dyspnea, bronchial hyperresponsiveness as assessed by methacholine challenge test, serum IgE

KLH conjugated synthetic peptide derived

methacholine challenge test, serum IgE levels, atopy and atopic dermatitis.
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

WB, IHC-P, IHC-F, IF, ICC, E

Rat, Pig, Dog, Bovine

from human NPSR1

O6W5P4

Rabbit

43 KDa

Liquid

laG

Polyclonal

201-300/371

Important Note

Background Descriptions

G protein-coupled receptors (GPRs), also known as seven transmembrane receptors, heptahelical receptors or 7TM receptors, comprise a superfamily of proteins that play a role in many different stimulus-response pathways. G protein coupled receptors translate extracellular signals into intracellular signals (G protein activation) and they respond to a variety of signaling molecules, such as hormones and neurotransmitters. GPR154 (G-protein coupled receptor 154), also known as NPSR1 (neuropeptide S receptor), GPRA (G-protein coupled receptor for asthma susceptibility) or PGR14, is a 371 amino acid protein that is thought to play a role in autocrine or paracrine signaling pathways. Ubiquitously expressed, GPR154 exists as nine alternatively spliced isoforms. Defects in the gene encoding GPR154 is the cause of asthma-related traits type 2 (ASRT2).

NPSR1 Polyclonal Antibody - Additional Information



Tel: 858.875.1900 Fax: 858.875.1999

Gene ID 387129

Other Names

Neuropeptide S receptor, G-protein coupled receptor 154, G-protein coupled receptor PGR14, G-protein coupled receptor for asthma susceptibility, NPSR1, GPR154, GPRA, PGR14

Target/Specificity

Ubiquitous. Isoform 1 is predominantly expressed in smooth muscle. Isoform 4 is predominantly expressed in epithelial cells. In bronchial biopsies, it is expressed in smooth muscle cells of asthma patients, but not in control patients; whereas in epithelial cells, its expression is consistently stronger in asthma patients.

Dilution

```
<span class ="dilution WB">WB~~1:1000/>span class
="dilution IHC-P">IHC-P~~N/A</span><br \><span class
="dilution IHC-F">IHC-F~~N/A</span><br \><span class
="dilution IF">IF~~1:50~200</span><br \><span class ="dilution ICC">ICC~~N/A</span><br
\><span class ="dilution E">E~~N/A</span>
```

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

NPSR1 Polyclonal Antibody - Protein Information

Name NPSR1

Synonyms GPR154, GPRA, PGR14

Function

G-protein coupled receptor for neuropeptide S (NPS) (PubMed: 16790440). Promotes mobilization of intracellular Ca(2+) stores (PubMed:16790440). Inhibits cell growth in response to NPS binding (PubMed: 15947423). Involved in pathogenesis of asthma and other IgE- mediated diseases.

Cellular Location

[Isoform 1]: Cell membrane; Multi-pass membrane protein [Isoform 4]: Cell membrane; Multi-pass membrane protein [Isoform 5]: Cytoplasm [Isoform 7]: Cytoplasm

Tissue Location

Isoform 4 is ubiquitous; it is detected in glandular epithelia of bronchus, stomach, small intestine, colon, uterus, esophagus, spleen, kidney, pancreas, prostate and breast Isoform 1 is detected in uterus, colon and prostate, and in the smooth muscle cell layer in bronchial and arterial walls (at protein level) (PubMed:15947423). Isoform 1 is predominantly expressed in smooth muscle. Isoform 4 is predominantly expressed in epithelial cells. In bronchial biopsies, it is expressed in smooth muscle cells of asthma patients, but not in control patients; whereas in epithelial cells, its expression is consistently stronger in asthma patients

NPSR1 Polyclonal Antibody - Protocols







Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NPSR1 Polyclonal Antibody - Images