10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NPW/Neuropeptide W Rabbit pAb

NPW/Neuropeptide W Rabbit pAb
Catalog # AP54535

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8N729
Reactivity	Rat
Predicted	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	18048
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Neuropeptide W 33-55/165
Epitope Specificity	
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted
SIMILARITY	Belongs to the neuropeptide B/W family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	NPW is a 165 amino acid secreted protein that is cleaved into two chains: neuropeptide W-23 (also designated NPW23 or L8) and neuropeptide W-30 (also known as NPW30 or L8C). Both NPW neuropeptides activate G-protein coupled receptors in the central nervous system to enhance cortisol secretion. Highly expressed in lymphoblastic leukemia, colorectal adenocarcinoma, fetal kidney, trachea and substantia nigra, NPW is also found at low levels in placenta, ovary, testis and uterus. NPW functions in organization of neuroendocrine signals and is also thought to enhance food and water intake as well as stress responses. The gene encoding NPW maps to human chromosome 16p13.3.

Additional Information

Gene ID	283869
Other Names	Neuropeptide W, Preproprotein L8, hPPL8, Neuropeptide W-23, NPW23, hL8, Neuropeptide W-30, NPW30, hL8C, NPW, PPL8, PPNPW
Target/Specificity	Detected at high levels in the substantia nigra, fetal kidney and trachea; at lower levels in testis, uterus, ovary and placenta. Not detectable in many regions of the central nervous system. Also detected at high levels in lymphoblastic leukemia and colorectal adenocarcinoma.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

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.

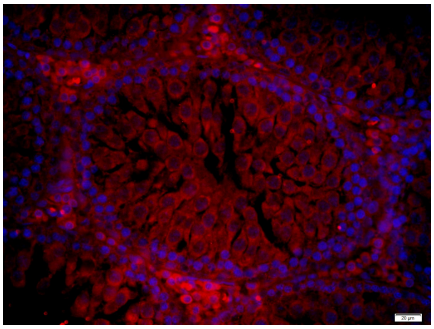
Protein Information

Name	NPW
Synonyms	PPL8, PPNPW
Function	Plays a regulatory role in the organization of neuroendocrine signals accessing the anterior pituitary gland. Stimulates water drinking and food intake. May play a role in the hypothalamic response to stress (By similarity). NPW23 activates GPR7 and GPR8 more efficiently than NPW30.
Cellular Location	Secreted
Tissue Location	Detected in cerebrospinal fluid and urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717) Detected at high levels in the substantia nigra, fetal kidney and trachea; at lower levels in testis, uterus, ovary and placenta. Not detectable in many regions of the central nervous system. Also detected at high levels in lymphoblastic leukemia and colorectal adenocarcinoma

Background

NPW is a 165 amino acid secreted protein that is cleaved into two chains: neuropeptide W-23 (also designated NPW23 or L8) and neuropeptide W-30 (also known as NPW30 or L8C). Both NPW neuropeptides activate G-protein coupled receptors in the central nervous system to enhance cortisol secretion. Highly expressed in lymphoblastic leukemia, colorectal adenocarcinoma, fetal kidney, trachea and substantia nigra, NPW is also found at low levels in placenta, ovary, testis and uterus. NPW functions in organization of neuroendocrine signals and is also thought to enhance food and water intake as well as stress responses. The gene encoding NPW maps to human chromosome 16p13.3.

Images



Paraformaldehyde-fixed, paraffin embedded (rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Neuropeptide W) Polyclonal Antibody, Unconjugated (AP54535) at 1:400 overnight at 4°C, followed by a conjugated secondary (AP54535-Cy3) at [1:500] for 90 minutes and DAPI staining of the nuclei.