Datasheet for ABIN7581920

anti-NPBWR1 antibody (Intracellular)

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Overview

Quantity:	50 µL
Target:	NPBWR1
Binding Specificity:	AA 145-158, Intracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This NPBWR1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	A Rabbit Polyclonal antibody to NPBWR1 receptor
Immunogen:	(C)ESRRVSGRTYGAAR, corresponding to amino acid residues 145 - 158 of mouse NPBWR1
Sequence:	(C)ESRRVSGRTY GAAR
Isotype:	IgG
Specificity:	Intracellular, 2nd loop.
Cross-Reactivity (Details):	The antibody is specific for NPBWR1, it will not recognize the human only receptor NPBWR2.
Predicted Reactivity:	Rat - identical, human - 12 out of 14 amino acid residues identical
Characteristics:	Anti-NPBWR1 Antibody (ABIN7581920) is a highly specific antibody directed against an epitope of the mouse protein. The antibody can be used in western blot and immunohistochemistry applications. It has been designed to recognize NPBWR1 from rat, mouse and human samples.

Product Details

Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	NPBWR1
Alternative Name:	NPBWR1 (NPBWR1 Products)
Background:	Neuropeptides B/W Receptor Type 1, G Protein-Coupled Receptor 7, GPR7,Neuropeptides B/W receptor type 1 (NPBWR1), also known as G-protein coupled receptor 7 (GPR7), is a member of the G-protein coupled receptor (GPCR) superfamily.NPBWR1 mediates the biological activities of Neuropeptide B (NPB) and neuropeptide W (NPW) that are structurally and functionally related endogenous neuropeptides. In humans, a second receptor termed NPBWR2 or GPR8, has been identified, however, NPBWR2 is absent in rodents.1,2NPBWR1 is expressed in the central nervous system (CNS) and in peripheral tissues. In the brain expression of NPBWR1 is found in several regions including hypothalamus, hippocampus and amygdala. Indeed, the distribution of NPBWR1 and its ligands in brain is in accordance to their established functions in appetite control and feeding behavior, as well as locomotion, analgesia and stress response.2,3Several studies have pointed to the role of NPBWR1 in pain modulation. Interestingly, NPBWR1 has structural similarities with the opioid receptors and in fact, it binds non-selective opioid ligands such as β-endorphin.3 It has been suggested, that a combination therapies of morphine (an opioid receptor ligand) and NPBWR1 agonists could provide a new avenue to treat inflammatory and neuropathic pain with less risk of adverse effects. 4In the periphery, NPBWR1 may be involved in energy homeostasis by regulating insulin secretion from pancreatic β cells and regulating white and brown adipose tissue. 3
Gene ID:	226304
UniProt:	P49681

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:300 Application Dilutions Western blot wb: 1:400
Restrictions:	For Research Use only

Handling

Format:	Lyophilized

Handling

Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).