Datasheet for ABIN7043431

anti-PTH2R antibody (Extracellular) (Atto 488)

1 Image

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Overview

Quantity:	50 µL
Target:	PTH2R
Binding Specificity:	AA 125-137, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PTH2R antibody is conjugated to Atto 488
Application:	Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Parathyroid Hormone 2 Receptor Conjugated to the Fluorescent Dye ATTO-488
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: CFLQPDINIGKQE, corresponding to amino acid residues 125-137 of rat PTH2R
Isotype:	IgG
Specificity:	Extracellular, N-terminus
Cross-Reactivity:	Mouse, Rat
Predicted Reactivity:	Mouse - identical, human - 11,13 amino acid residues identical
Characteristics:	Anti-PTH2R (extracellular) Antibody (ABIN7043430, ABIN7045114 and ABIN7045115) is a

Product Details

	highly specific antibody directed against an extracellular epitope of the rat Parathyroid hormone 2 receptor. The antibody can be used in western blot analysis. It has been designed to recognize PTH2 receptor from human, rat and mouse samples. \nAnti-PTH2R (extracellular)-Antibody (ABIN7043431) is directly labeled with an fluorescent dye. ATTO dyes are characterized by strong absorption (high extinction coefficient), high fluorescence quantum yield, and high photo-stability. The label is analogous to the well known dye fluorescein isothiocyanate (FITC) and can be used with filters typically used to detect FITC. Anti-PTH2R (extracellular)- Antibody has been tested in immunohistochemistry applications and is specially suited to experiments requiring simultaneous labeling of different markers.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	PTH2R
Alternative Name:	PTH2R (PTH2R Products)
Background:	Parathyroid hormone 2 receptor, PTH2 receptor, PTHR2,PTH (parathyroid hormone) regulates Ca2+ and phosphate homeostasis through its action on specific receptors in kidney and bone. There are two known PTH receptors in humans, PTH receptor type 1 (PTH1 receptor) and PTH receptor type 2 (PTH2 receptor)1.The PTH2 receptor is a member of a class B subfamily of G-protein-coupled receptors that includes the receptors for the glucagon-GHRH-VIP family of peptides (glucagon, GLP-I, GIP, GHRH, VIP, secretin, PACAP) and for calcitonin and CRF2. PTH2 receptor shares the same basic structure of the GPCR superfamily of proteins. A defining feature of the family B receptors is the relatively long extracellular N-terminal domain, which comprises about 150 amino acids and is important for ligand binding. The seven transmembrane domains are believed to be arranged in a circular or oval configuration, as seen in rhodopsin. The transmembrane domains are connected by three extracellular and three intracellular loops, and a C-terminal tail of about 130 amino acids extends intracellularly3.Northern blots of human messenger RNA (mRNA) show that the PTH2 receptor is most highly expressed in the central nervous system, preferentially in the hypothalamic regions and is also detected in the pancreas, testis, placenta, and lung4. Recent data support that PTH2 receptor is involved in hypothalamic releasing-factor secretion and pain5. Alternative names: PTH2R, Parathyroid hormone 2 receptor, PTH2 receptor, PTHR2
Gene ID:	81753

Target Details

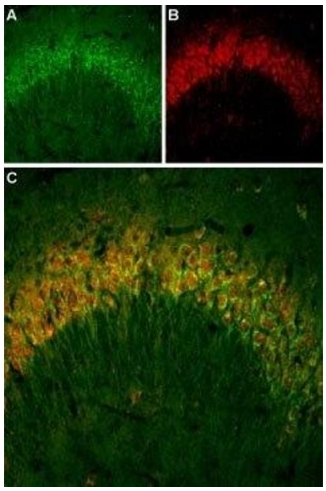
NCBI Accession:	NM_005048
UniProt:	P70555
Pathways:	cAMP Metabolic Process

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:60 Application Dilutions Western blot wb: N/A
Comment:	Negative Control: (ABIN7582041) Blocking Peptide: (ABIN7236237)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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, protected from the light, 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).



Immunohistochemistry

Image 1. Multiplex staining of Parathyroid hormone 2 receptor and Vesicular glutamate transporter 2 in mouse hippocampus - Immunohistochemical staining of mouse hippocampal CA3 region frozen sections using Anti-PTH2R (extracellular)-ATTO Fluor-488 Antibody (ABIN7043431), (1:60) and Anti-VGLUT2-ATTO Fluor-594 Antibody (ABIN7043682), (1:60). A. PTH2 receptor staining (green). B. VGLUT2 staining (red) in same section. C. Merge of A and B suggests extensive localization of PTH2R on glutamatergic neurons.