

Datasheet for 600-401-BM9**GPR3 Antibody****Overview**

Description:	Anti-GPR3 (RABBIT) Antibody - 600-401-BM9
Item No.:	600-401-BM9
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background: GPR3, also known as ACCA, is a G-protein coupled receptor that constitutively activates adenylate cyclase and is highly expressed in the central nervous system. Overexpression of GPR3 stimulates the production of amyloid-beta peptide (Abeta), the deposition of which is one of the pathological hallmarks of Alzheimer 's disease (AD), while the ablation of GPR3 prevented the accumulation of Abeta in vitro and in an AD mouse model. This is of particular interest because of the proximity of a reported candidate Alzheimer 's disease (AD) locus, suggesting that GPR3 may be a potential therapeutic target for the treatment of AD. GPR3 has also been shown to block the proliferation of cerebellar granule cell precursors (GCP) during postnatal development by inhibiting the Shh-induced proliferation of GCP, indicating that GPR3 activation may represent one of the signals that triggers the postnatal cell cycle exit and terminal differentiation of GPCs.

Synonyms:	GPR3 Antibody, ACCA, ACCA, G-protein coupled receptor 3, ACCA orphan receptor
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	GPR3
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-GPR3 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 13 amino acid synthetic peptide from near the C-terminus of human GPR3.
Purity/Specificity:	Anti-GPR3 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with GPR3 from other sources has not been determined.
Relevant Links:	• UniProtKB - P46089 • GeneID - 2827 • NCBI - NP_005272.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-GPR3 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 35 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	1-2 µg/mL

Formulation

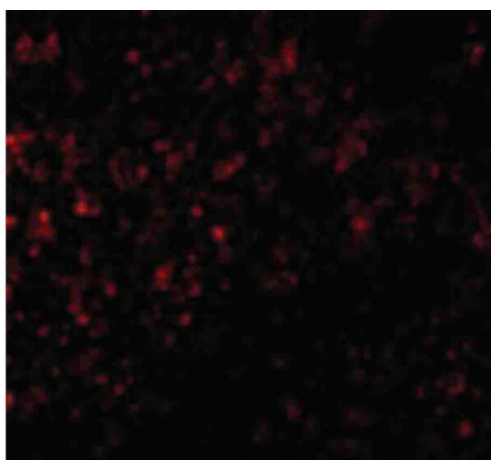
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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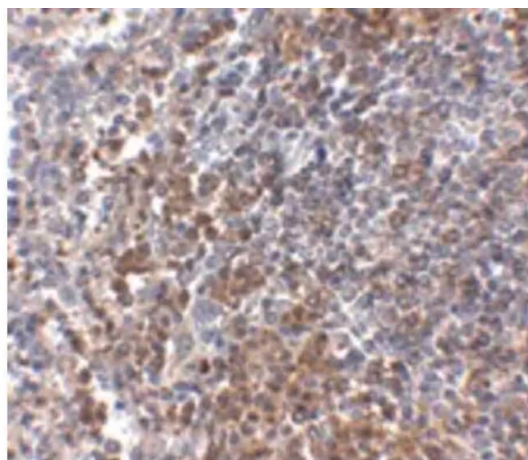
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



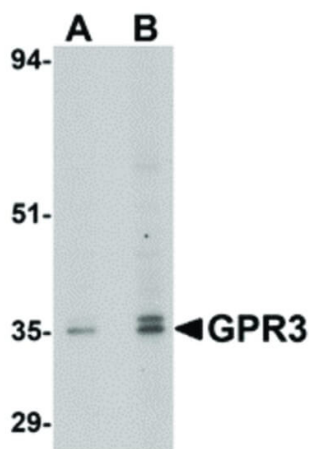
Immunofluorescence Microscopy

Immunofluorescence Microscopy of GPR3 antibody. Tissue: Human spleen cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: GPR3 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: GPR3 is a membrane protein. Staining: GPR3 as red fluorescent signal.



Immunohistochemistry

Immunohistochemistry of GPR3 antibody. Tissue: human spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: GPR3 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: GPR3 is a membrane protein. Staining: GPR3 as precipitated brown signal with blue nuclear counterstain.

**Western Blot**

Western Blot of GPR3 antibody. Lane 1: EL4 cell lysate at 1 $\mu\text{g/mL}$. Lane 2: EL4 cell lysate at 2 $\mu\text{g/mL}$. Load: 35 μg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 35 kDa, 35 kDa for GPR3. Other band(s): GPR3 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.