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GNB1 Rabbit pAb

Catalog # AP98448

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P62873
Other Accession	P62873
Reactivity	Rat, Mouse
Predicted	Pig, Human, Chicken, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37377
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human G protein beta subunit GI
Epitope Specificity	101-200/341
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the WD repeat G protein beta family. Contains 7 WD repeats.
SUBUNIT	G proteins are composed of 3 units, alpha, beta and gamma. Interacts with ARHGEF18 and RASD2. The heterodimer formed by GNB1 and GNG2 interacts with PTH1R (via C-terminus).
Post-translational modifications	Phosphorylation at His-266 by NDKB contributes to G protein activation by increasing the high energetic phosphate transfer onto GDP (By similarity).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Heterotrimeric guanine nucleotide binding proteins (G proteins), which integrate signals between receptors and effector proteins, are composed of an alpha, a beta, and a gamma subunit. GNB1 is a beta subunit. The beta and gamma chains are required for the GTPase activity, for replacement of GDP by GTP, and for G protein-effector interaction.

Additional Information

Gene ID	2782
Other Names	HG2A; MDS; MRD42; Gnb-1; GBB1_BOVIN; GNB1; Transducin beta chain 1; GBB1_HUMAN; GBB1_MOUSE; GBB1_RAT; GBB1_XENLA; XGbeta1; G protein subunit beta 1; guanine nucleotide binding protein (G protein), beta polypeptide 1; guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1
Dilution	WB=1:500-2000,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	GNB1 (HGNC:4396)
Function	Guanine nucleotide-binding proteins (G proteins) are involved as a modulator or transducer in various transmembrane signaling systems (PubMed:29925951, PubMed:33762731, PubMed:34239069, PubMed:35610220, PubMed:35714614, PubMed:35835867, PubMed:36087581, PubMed:36989299, PubMed:37327704, PubMed:37935376, PubMed:37935377, PubMed:37963465, PubMed:37991948, PubMed:38168118, PubMed:38552625, PubMed:39103320). The beta and gamma chains are required for the GTPase activity, for replacement of GDP by GTP, and for G protein-effector interaction (PubMed:29925951, PubMed:33762731, PubMed:34239069, PubMed:35610220, PubMed:35714614, PubMed:35835867, PubMed:36087581, PubMed:36989299, PubMed:37327704, PubMed:37935376, PubMed:37935377, PubMed:37963465, PubMed:38168118, PubMed:38552625, PubMed:39103320). Involved in bitter and sweet taste transduction as well as in umami (monosodium glutamate, monopotassium glutamate, and inosine monophosphate) taste transduction (PubMed:40339580, PubMed:38600377, PubMed:38776963).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.