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CALCR Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5688b

Product Information

Application	WB, FC, IF, E
Primary Accession	P30988
Other Accession	NP_001733.1
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22504
Calculated MW	55345
Antigen Region	465-494

Additional Information

Gene ID	799
Other Names	Calcitonin receptor, CT-R, CALCR
Target/Specificity	This CALCR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 465-494 amino acids of human CALCR.
Dilution	WB~~1:1000 FC~~1:10~50 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CALCR Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CALCR (HGNC:1440)
Function	G protein-coupled receptor activated by ligand peptides amylin (IAPP), calcitonin (CT/CALCA) and calcitonin gene-related peptide type 1 (CGRP1/CALCA) (PubMed:35324283, PubMed:38603770). CALCR interacts with receptor-activity-modifying proteins RAMP1, 2 and 3 to form receptor

complexes AMYR1, 2 and 3, respectively (PubMed:35324283, PubMed:38603770). IAPP, CT and CGRP1 activate CALCR and AMYRs with distinct modes of receptor activation resulting in specific phenotypes (PubMed:35324283, PubMed:38603770). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide- binding proteins (G proteins) and modulates the activity of downstream effectors. Activates cAMP-dependent pathway (PubMed:35324283, PubMed:7476993).

Cellular Location Cell membrane; Multi-pass membrane protein

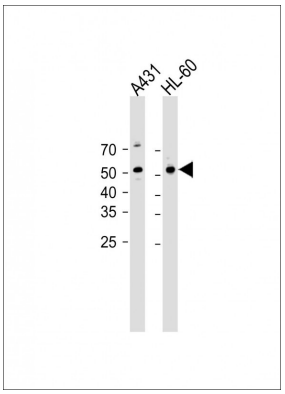
Background

CALCR is a high affinity receptor for the peptide hormone calcitonin and belongs to a subfamily of seven transmembrane-spanning G protein-coupled receptors. The encoded protein is involved in maintaining calcium homeostasis and in regulating osteoclast-mediated bone resorption. Polymorphisms in this gene have been associated with variations in bone mineral density and onset of osteoporosis.

References

Nussenzveig, D.R., et al. Endocrinology 136(5):2047-2051(1995) Nakamura, M., et al. Biochem. Biophys. Res. Commun. 209(2):744-751(1995) Egerton, M., et al. J. Mol. Endocrinol. 14(2):179-189(1995) Gorn, A.H., et al. J. Clin. Invest. 90(5):1726-1735(1992)

Images



All lanes : Anti-CALCR Antibody (C-term) at 1:500 dilution Lane 1: A431 whole cell lysate Lane 2: HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 55kDa Blocking/Dilution buffer: 5% NFDM/TBST.