
Product Name: CaSR Rabbit Polyclonal Antibody**Catalog #: APRab07993**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000
Molecular Weight	140kDa

Antigen Information

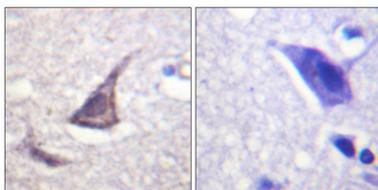
Gene Name	CASR
Alternative Names	CASR; GPRC2A; PCAR1; Extracellular calcium-sensing receptor; CaSR; Parathyroid cell calcium-sensing receptor; PCaR1
Gene ID	846.0
SwissProt ID	P41180
Immunogen	The antiserum was produced against synthesized peptide derived from human Calcium Sensing Receptor. AA range:854-903

Background

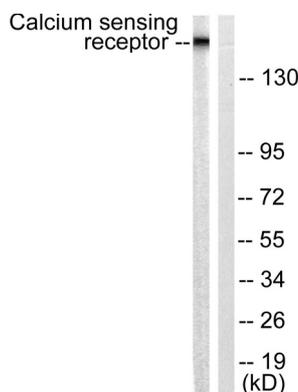
The protein encoded by this gene is a G protein-coupled receptor that is expressed in the parathyroid hormone (PTH)-producing chief cells of the parathyroid gland, and the cells lining the kidney tubule. It senses small changes in circulating calcium concentration and couples this information to intracellular signaling pathways that modify PTH secretion or renal cation handling, thus this protein plays an essential role in maintaining mineral ion homeostasis. Mutations in this gene cause familial hypocalciuric hypercalcemia, familial, isolated hypoparathyroidism, and neonatal severe primary hyperparathyroidism. [provided by RefSeq, Jul 2008],disease:Defects in CASR are the cause of autosomal dominant hypoparathyroidism (FIH) [MIM:146200]. FIH is characterized by hypocalcemia and hyperphosphatemia due to inadequate secretion of parathyroid hormone. Symptoms are seizures, tetany and cramps.,disease:Defects in CASR are the cause of familial hypocalciuric hypercalcemia type 1 (FHH) [MIM:145980]; in which the receptor has reduced activity. FHH is characterized by altered calcium homeostasis. Affected individuals exhibit mild or modest hypercalcemia, relative hypocalciuria, and inappropriately normal PTH levels.,disease:Defects in CASR are the cause of neonatal severe primary hyperparathyroidism (NSHPT) [MIM:239200]; in which the receptor has reduced activity. NSHPT is a rare autosomal recessive life-threatening disorder characterized by very high serum calcium concentrations, skeletal demineralization, and parathyroid hyperplasia. In some instances NSHPT has been demonstrated to be the homozygous form of FHH.,function:Senses changes in the extracellular concentration of calcium ions. The activity of this receptor is mediated by a G-protein that activates a phosphatidylinositol-calcium second messenger system.,PTM:N-glycosylated.,PTM:Ubiquitinated by RNF19A; which induces proteasomal degradation.,similarity:Belongs to the G-protein coupled receptor 3 family.,subunit:Interacts with VCP and RNF19A.,tissue specificity:Found in kidney, but not in brain, lung, liver, heart, skeletal muscle, or placenta.,

Research Area

Image Data



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Calcium Sensing Receptor Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from LOVO cells, using Calcium Sensing Receptor Antibody. The lane on the right is blocked with the synthesized peptide.

