

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



## Summary

<b>Production Name</b>	CaSR Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

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

## Application

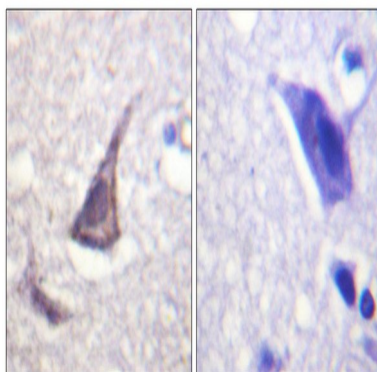
<b>Dilution Ratio</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000..
<b>Molecular Weight</b>	140kD

## 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.,

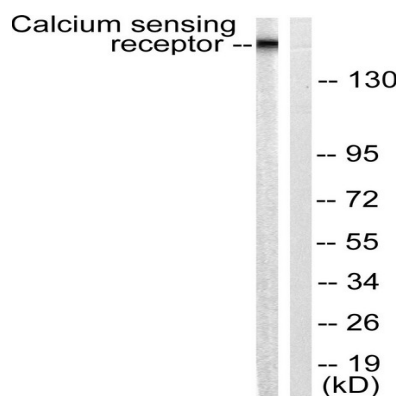
## Research Area

## 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.

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

#### **Note**

For research use only.