Best Tools for immunology Research

CaSR Polyclonal Antibody

Catalog No :	YT0666
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	CaSR
Fields :	>>NOD-like receptor signaling pathway;>>Parathyroid hormone synthesis, secretion and action
Gene Name :	CASR
Protein Name :	Extracellular calcium-sensing receptor
Human Gene Id :	846
Human Swiss Prot No :	P41180
Mouse Gene Id :	12374
Mouse Swiss Prot No :	Q9QY96
Rat Gene Id :	24247
Rat Swiss Prot No :	P48442
Immunogen :	The antiserum was produced against synthesized peptide derived from human Calcium Sensing Receptor. AA range:854-903
Specificity :	CaSR Polyclonal Antibody detects endogenous levels of CaSR protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 140kD

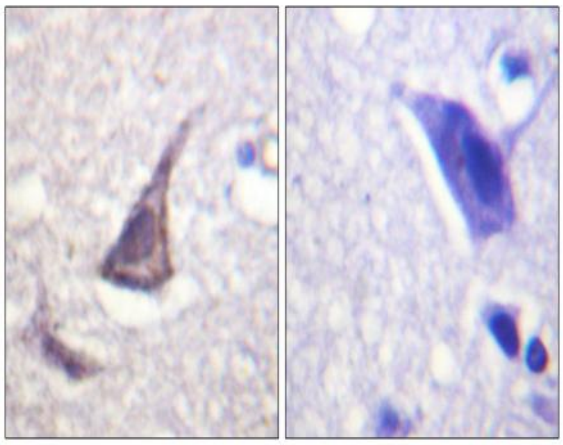
Background : The protein encoded by this gene is a G protein-coupled receptor that is expressed in the parathyroid hormone (PTH)-producing chief cells of the parathyroid gland, and the cells lining the kidney tubule. It senses small changes in circulating calcium concentration and couples this information 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],

Function : 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

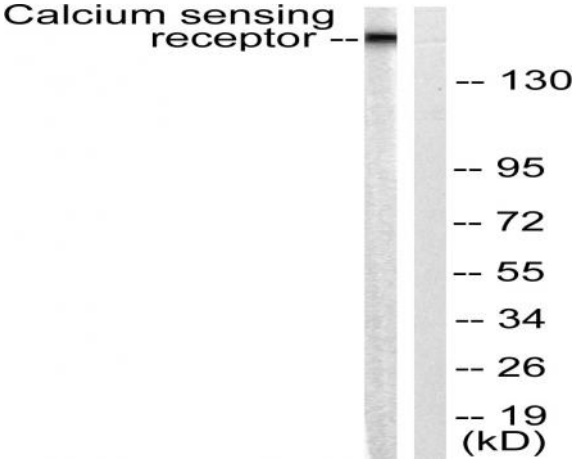
Subcellular Location : Cell membrane ; Multi-pass membrane protein .

Expression : Expressed in the temporal lobe, frontal lobe, parietal lobe, hippocampus, and cerebellum. Also found in kidney, lung, liver, heart, skeletal muscle, placenta.

Products Images



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.