

CaSR recombinant protein

Recombinant Human CaSR protein (His tag)

CATALOG #
AAA178166

HOST
E Coli

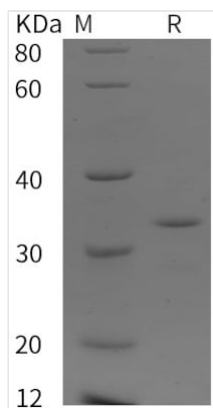
PRODUCT SYNONYMS

CaSR; Recombinant Human CaSR protein (His tag); Ca sensing receptor; Ca²⁺ sensing receptor 1; CAR; EIG8; Extracellular calcium sensing receptor; FHH; FIH; GPRC2A; HHC1; NSHPT; PCAR 1; PCaR1; CaSR recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	>95 % as determined by reducing SDS-PAGE.
Form/Format	Lyophilized from sterile PBS, pH 7.4.
Sequence	Lys863-Ser 1078
Species	Human
Tag	N-His
Reconstitution	We recommend centrifuging the vial before opening to bring the contents to the bottom. Do not mix by vortex. It is recommended that sterile water be added to the vial to prepare a stock solution of 1 mg/mL. Concentration is measured by UV-Vis.
Preparation and Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20°C to -80°C. Reconstituted protein solution can be stored at 4°C to 8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for CaSR recombinant protein	CaSR, the extracellular Calcium-Sensing Receptor, is a widely expressed G-protein coupled receptor (GPCR) involved in calcium homeostasis. CaSR operates as a sensor in parathyroid and kidney, and alterations in its activity have been shown to cause thyroid disease in humans. Activation of the receptor in response to extracellular calcium or other ligands causes activation of phospholipase C (PLC), release of IP3 and release of calcium from intracellular stores. Proinflammatory cytokines IL-1beta and TNF-alpha increase CaSR gene expression in human thyroid and kidney cells through activation of the NF-kappaB pathway, and this pathway may be involved in hypocalcemia often seen in critically ill patients. Elevated calcium concentration and CaSR expression have been linked to proliferation and metastasis of skeletal metastatic prostate cancer cell lines. In intestinal epithelial cells, CaSR is involved in regulation of cyclic nucleotide metabolism and the fluid secretion that results in life-threatening fluid loss in response to intestinal pathogens. The interaction of CaSR with the actin-binding protein filamin may provide scaffolding for the organization of signaling pathways converging on the cytoskeleton, including CaSR-mediated MAPK pathway activation.
Product Categories/Family for CaSR recombinant protein	Neuroscience; Signal Transduction

NCBI AND UNIPROT INFORMATION

NCBI GI #	37577159
NCBI GeneID	846
NCBI Accession #	NP_000379.2
NCBI GenBank Nucleotide #	NM_000388.3
UniProt Accession #	P41180; Q13912; Q16108; Q16109; Q16110; Q16379; Q2M1T0; Q4PJ19
Molecular Weight	Molecular Mass: 23.65 kDa Aproximate Molecular Mass: 35kDa
NCBI Official Full Name	extracellular calcium-sensing receptor isoform 2
NCBI Official Synonym Full Names	calcium-sensing receptor
NCBI Official Symbol	CASR
NCBI Official Synonym Symbols	CAR; FHH; FIH; HHC; EIG8; HHC1; NSHPT; PCAR1; GPRC2A
NCBI Protein Information	extracellular calcium-sensing receptor; parathyroid Ca(2+)-sensing receptor 1; parathyroid cell calcium-sensing receptor
UniProt Protein Name	Extracellular calcium-sensing receptor
UniProt Gene Name	CASR
UniProt Synonym Gene Names	GPRC2A; PCAR1; CaSR; PCaR1
UniProt Entry Name	CASR_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/casr-recombinant-protein-e-coli/178166>