

**Anti-CaSR Antibody**

**Our Anti-CaSR rabbit polyclonal primary antibody from PhosphoSolutions is produced in-house. It detects**  
**Catalog # AN1327**

**Specification****Anti-CaSR Antibody - Product Information**

Primary Accession	<a href="#">P48442</a>
Reactivity	<b>Bovine</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>120868</b>

**Anti-CaSR Antibody - Additional Information**

Gene ID **24247**

**Other Names**

Ca sensing receptor antibody, Ca<sup>2+</sup> sensing receptor 1 antibody, Ca<sup>2+</sup> sensing receptor antibody, Calcium sensing receptor antibody, CAR antibody, CaSR antibody, CASR\_HUMAN antibody, Extracellular calcium sensing receptor antibody, Extracellular calcium sensing receptor [Precursor] antibody, Extracellular calcium-sensing receptor antibody, FHH antibody, FIH antibody, GPRC2A antibody, HHC antibody, HHC1 antibody, Hypocalciuric hypercalcemia 1 antibody, Hypocalciuric hypercalcemia 1 severe neonatal hyperparathyroidism antibody, MGC138441 antibody, NSHPT antibody, Parathyroid Ca(2+) sensing receptor 1 antibody, Parathyroid Cell calcium sensing receptor antibody, Parathyroid Cell calcium-sensing receptor antibody, PCAR 1 antibody, PCaR1 antibody

**Target/Specificity**

Calcium sensing receptor, CaSR, is a unique G protein-coupled receptor activated by extracellular Ca<sup>2+</sup>, Mg<sup>2+</sup>, Sr<sup>2+</sup>, Mn<sup>2+</sup>, Ba<sup>2+</sup>, Ni<sup>2+</sup>, Al<sup>2+</sup>, Gd<sup>3+</sup>, amino acids, polyamines, pH and ionic strength (Quinn, S.J. et al., 1998). CaSR is a cell surface dimer located in the caveolin-rich plasma membrane domains (Kifor, O., et al., 1998). CaSR tightly regulates extracellular calcium levels to avoid hyper/hypo-calcemia through complex interactions with PTH, calcitonin, and vitamin D by balancing their effects on the parathyroid glands, bone, kidney, and intestine (Díaz-Soto, G. et al., 2016). Additionally, CaSR has been identified in the nervous system and recent studies suggest CaSR as a direct target of reducing Aβ<sub>42</sub> secretion that may contribute to Alzheimer's Disease (Armato, U., et al., 2013). Recent studies have shown CaSR negatively impacts the formation and progression of neuroblastomas by calcium exposure leading NB cells overexpressing CaSR to undergo apoptosis by means of activating ERK1/2 (Casalà, C., et al., 2013).

**Format**

Antigen Affinity Purified from Pooled Serum

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Anti-CaSR Antibody is for research use only and not for use in diagnostic or therapeutic

procedures.

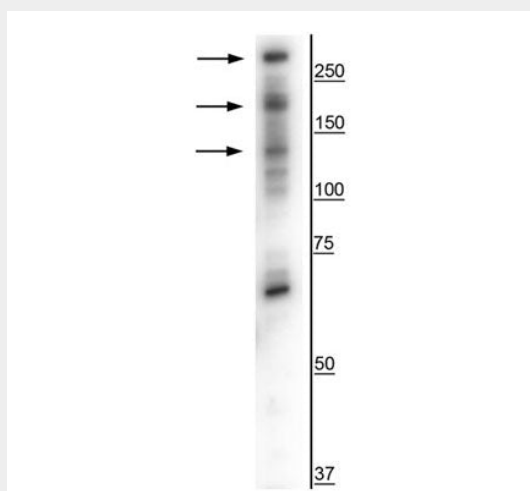
**Shipping**  
Blue Ice

### Anti-CaSR Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-CaSR Antibody - Images



Western blot of lysed HFF cells that were serum starved for 24 hours and then refed for 30 minutes showing specific immunolabeling of the ~130-260 kDa CaSR protein.

### Anti-CaSR Antibody - Background

Calcium sensing receptor, CaSR, is a unique G protein-coupled receptor activated by extracellular  $\text{Ca}^{2+}$ ,  $\text{Mg}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Mn}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Al}^{2+}$ ,  $\text{Gd}^{3+}$ , amino acids, polyamines, pH and ionic strength (Quinn, S.J. et al., 1998). CaSR is a cell surface dimer located in the caveolin-rich plasma membrane domains (Kifor, O., et al., 1998). CaSR tightly regulates extracellular calcium levels to avoid hyper/hypo-calcemia through complex interactions with PTH, calcitonin, and vitamin D by balancing their effects on the parathyroid glands, bone, kidney, and intestine (Díaz-Soto, G. et al., 2016). Additionally, CaSR has been identified in the nervous system and recent studies suggest CaSR as a direct target of reducing  $\text{A}\beta_{42}$  secretion that may contribute to Alzheimer's Disease (Armato, U., et al., 2013). Recent studies have shown CaSR negatively impacts the formation and progression of neuroblastomas by calcium exposure leading NB cells overexpressing CaSR to undergo apoptosis by means of activating ERK1/2 (Casalà, C., et al., 2013).