


Product datasheet

Anti-CaSR antibody ab137408

★★★★☆ [3 Abreviews](#) [8 References](#) [4 Images](#)

Overview

Product name	Anti-CaSR antibody
Description	Rabbit polyclonal to CaSR
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Cow, Cat, Dog 
Immunogen	Recombinant fragment corresponding to Human CaSR aa 151-376.
Positive control	HeLa whole cell lysate (ab150035); HeLa cells; SAS xenograft tissue; 293T, A431 and H1299.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab137408 in the following tested applications.

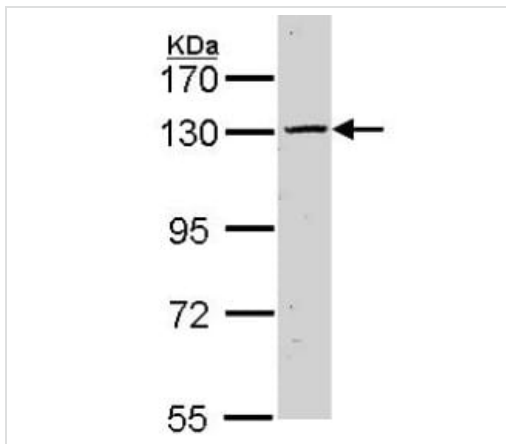
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		1/100 - 1/1000.
IHC-P	★★★★★ (1)	1/100 - 1/1000. Suggested antigen retrieval using heat mediated 10mM Citrate buffer (pH6.0) or Tris-EDTA buffer (pH8.0).
WB	★★★★☆☆ (2)	1/500 - 1/3000. Predicted molecular weight: 121 kDa.

Target

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.
Tissue specificity	Expressed in the temporal lobe, frontal lobe, parietal lobe, hippocampus, and cerebellum. Also found in kidney, lung, liver, heart, skeletal muscle, placenta.
Involvement in disease	<p>Defects in CASR are the cause of familial hypocalciuric hypercalcemia type 1 (FHH) [MIM:145980]. FHH is characterized by altered calcium homeostasis. Affected individuals exhibit mild or modest hypercalcemia, relative hypocalciuria, and inappropriately normal PTH levels.</p> <p>Defects in CASR are the cause of neonatal severe primary hyperparathyroidism (NSHPT) [MIM:239200]. 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.</p> <p>Defects in CASR are a cause of familial isolated hypoparathyroidism (FIH) [MIM:146200]; also called autosomal dominant hypoparathyroidism or autosomal dominant hypocalcemia. FIH is characterized by hypocalcemia and hyperphosphatemia due to inadequate secretion of parathyroid hormone. Symptoms are seizures, tetany and cramps. An autosomal recessive form of FIH also exists.</p> <p>Defects in CASR are the cause of idiopathic generalized epilepsy type 8 (IGE8) [MIM:612899]; also known as EIG8. A disorder characterized by recurring generalized seizures in the absence of detectable brain lesions and/or metabolic abnormalities. Seizure types are variable, but include myoclonic seizures, absence seizures, febrile seizures, complex partial seizures, and generalized tonic-clonic seizures.</p> <p>Note=Homozygous defects in CASR can be a cause of primary hyperparathyroidism in adulthood. Patients suffer from osteoporosis and renal calculi, have marked hypercalcemia and increased serum PTH concentrations.</p>
Sequence similarities	Belongs to the G-protein coupled receptor 3 family.
Post-translational modifications	N-glycosylated. Ubiquitinated by RNF19A; which induces proteasomal degradation.
Cellular localization	Cell membrane.

Images

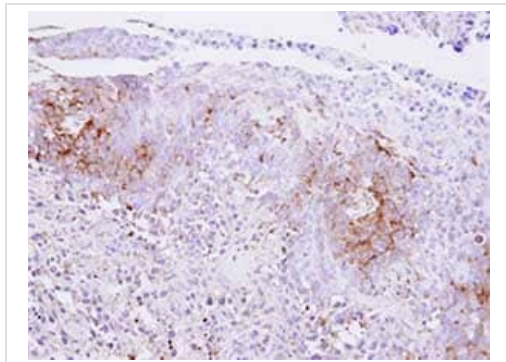


Western blot - Anti-CaSR antibody (ab137408)

Anti-CaSR antibody (ab137408) at 1/1000 dilution + HeLa whole cell lysate at 30 µg

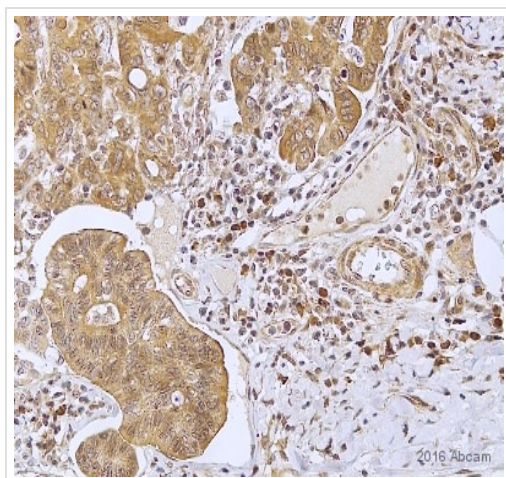
Predicted band size: 121 kDa

7.5% SDS PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CaSR antibody (ab137408)

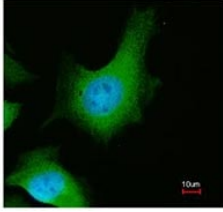
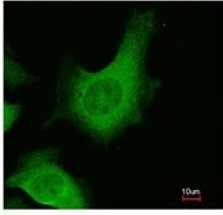
Immunohistochemical analysis of paraffin-embedded SAS xenograft labelling CaSR with ab137408 at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CaSR antibody (ab137408)

This image is courtesy of an anonymous Abreview

ab137408 staining CaSR in Human colon cancer tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with protein block serum-free for 20 minutes at 20°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/100) for 2 hours at 22°C. A HRP-conjugated Goat polyclonal was used as the secondary antibody.



Immunofluorescent analysis of paraformaldehyde-fixed HeLa cells labelling CaSR with ab137408 at 1/200 dilution. Lower panel merged with DNA probe.

Immunocytochemistry/ Immunofluorescence - Anti-CaSR antibody (ab137408)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors