

Datasheet for 600-401-AE5**CASR Antibody****Overview**

Description:	Anti-CASR (RABBIT) Antibody - 600-401-AE5
Item No.:	600-401-AE5
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The calcium-sensing receptor protein (CASR) 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 (1). 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 (1). Mutations in this gene cause familial hypocalciuric hypercalcemia, familial, isolated hypoparathyroidism, and neonatal severe primary hyperparathyroidism (1,2). Recent evidence suggests that activated CASR contributes to the cytokine secretion through the partial MAPK and NF-kappaB pathways in T cells (3).
Synonyms:	CASR Antibody, CAR, FHH, FIH, HHC, EIG8, HHC1, NSHPT, PCAR1, GPRC2A, HYPOC1, Extracellular calcium-sensing receptor, Parathyroid cell calcium-sensing receptor 1, CaSR
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CASR
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-CASR antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid peptide near the N-terminus of human CASR.
Purity/Specificity:	Anti-CASR antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. CASR antibody is human, mouse and rat reactive. At least two isoforms of CASR are known to exist.
Relevant Links:	• UniProtKB - P41180 • GeneID - 846 • NCBI - NP_001171536

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-CASR Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 121 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:20,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	1-2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

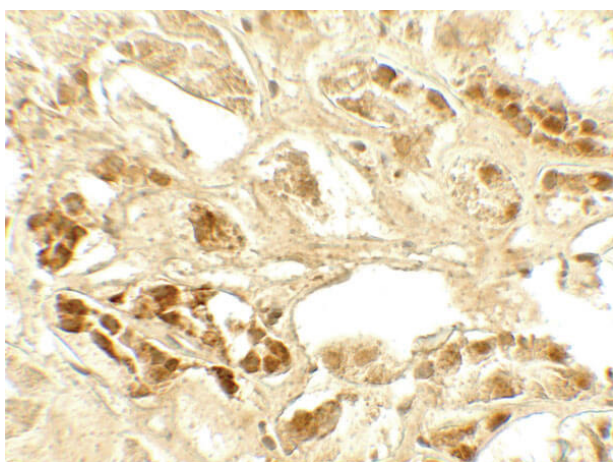
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

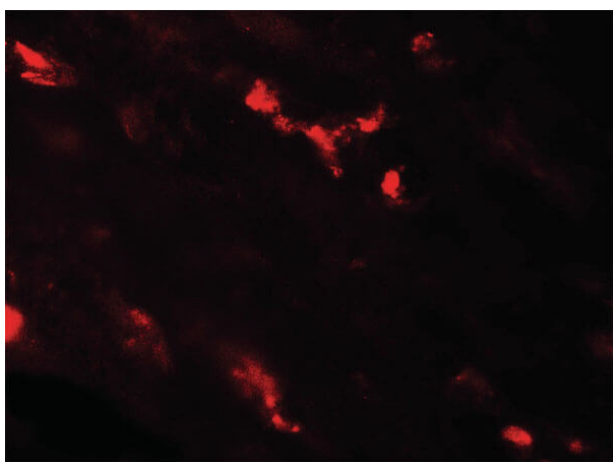
Expiration: Expiration date is one (1) year from date of receipt.

Images



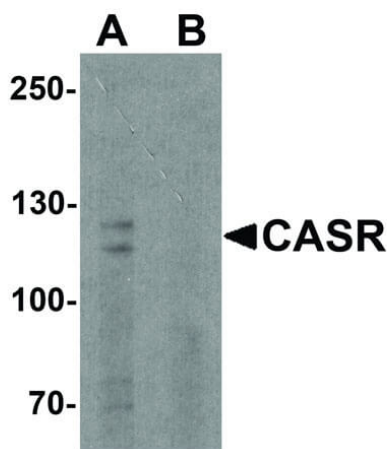
Immunohistochemistry

Immunohistochemistry of Rabbit anti-CASR antibody. Tissue: human kidney tissue. Primary antibody: CASR antibody at 5 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:5,000. Localization: CASR is located on the membrane. Staining: CASR as precipitated brown signal.



Immunofluorescence Microscopy

Immunofluorescence Microscopy of Rabbit anti-CASR antibody. Tissue: human kidney. Primary antibody: CASR antibody at 20 µg/mL. Secondary antibody: Fluorescein rabbit secondary antibody at 1:20,000. Localization: CASR is located on the membrane. Staining: CASR as red fluorescent signal.

**Western Blot**

Western Blot of Rabbit anti-CASR antibody. Lane A: EL4 cell lysate in absence of blocking peptide. Lane B: EL4 cell lysate in presence of blocking peptide. Primary antibody: CASR antibody at 1 µg/mL overnight at 4°C. Secondary antibody: Goat anti-rabbit HRP secondary antibody. Block: 5% BLOTTO. Predicted/Observed size: 101,120 kDa, 115,125 kDa for CASR.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.