Calcium Sensing Receptor Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human, Rat
Published Species	Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to residues A(12) L A W H S S A Y G P D Q R A Q(27) of rat CaSR.
Form	Liquid
Concentration	1 mg/mL
Purification	Antigen affinity chromatography
Storage buffer	PBS
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2071477

Applications	Tested Dilution	Publications
Western Blot (WB)	1:100	3 Publications
Immunohistochemistry (IHC)	-	6 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunocytochemistry (ICC/IF)	1:10-1:100	2 Publications

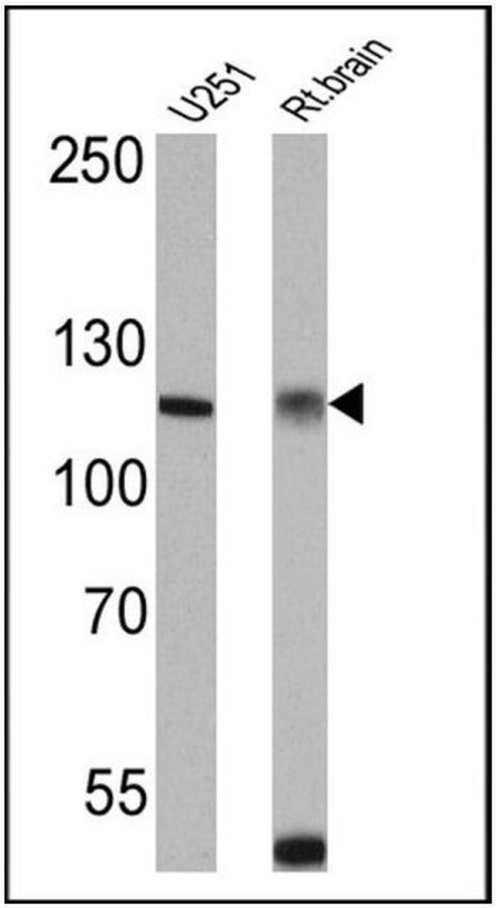
Product Specific Information

PA1-934A detects calcium sensing receptor (CaSR) from human and rat tissues.

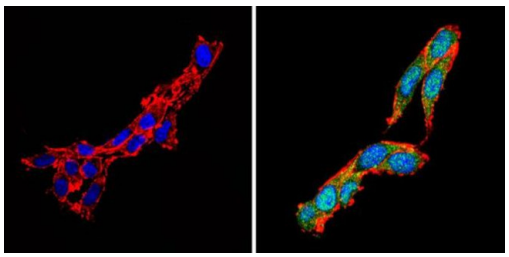
PA1-934A has been successfully used in Western blot and ICC/IF procedures. By Western blot, this antibody detects an ~120 kDa protein representing CaSR from HEK393 cells and rat brain homogenate.

The PA1-934A immunizing peptide corresponds to amino acid residues 12-27 from rat CaSR. This peptide (Cat.# PEP-009) is available for use in neutralization and control experiments.

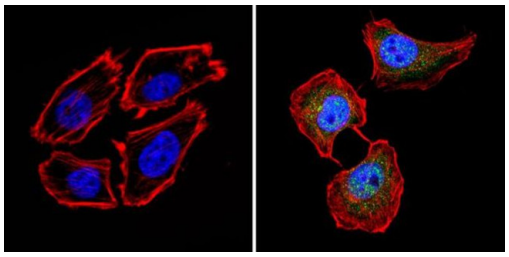
Product Images For Calcium Sensing Receptor Polyclonal Antibody



Calcium Sensing Receptor Antibody (PA1-934A) in WB
Western blot analysis of Calcium Sensing Receptor was performed by loading 25 µg of U251 (lane 1) and rat brain (lane 2) cell lysates onto an SDS polyacrylamide gel. Proteins were transferred to a PVDF membrane and blocked at 4ºC overnight. The membrane was probed with a Calcium Sensing Receptor polyclonal antibody (Product # PA1-934A) at a dilution of 1:500 overnight at 4°C, washed in TBST, and probed with an HRP-conjugated secondary antibody for 1 hr at room temperature in the dark. Chemiluminescent detection was performed using Pierce ECL Plus Western Blotting Substrate (Product # 32132). Results show a band at ~120 kDa.



Calcium Sensing Receptor Antibody (PA1-934A) in ICC/IF
Immunofluorescent analysis of Calcium Sensing Receptor (green) showing staining in the cytoplasm and nucleus of PC12 cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a Calcium Sensing Receptor polyclonal antibody (Product # PA1-934A) in 3% BSA-PBS at a dilution of 1:20 and incubated overnight at 4 ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.



Calcium Sensing Receptor Antibody (PA1-934A) in ICC/IF
Immunofluorescent analysis of Calcium Sensing Receptor (green) showing staining in the cytoplasm and nucleus of U251 cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a Calcium Sensing Receptor polyclonal antibody (Product # PA1-934A) in 3% BSA-PBS at a dilution of 1:20 and incubated overnight at 4 ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.

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12 References

Western Blot (3)

Journal of cell science

Evidence for a regulated Ca^{2+} entry in proximal tubular cells and its implication in calcium stone formation.

"PA1-934A was used in Immunohistochemistry to show the existence of a regulated transcellular Ca2+ entry pathway in luminal membrane proximal tubule cells induced by Ca2+ sensing receptor-mediated activation of transient receptor potential canonical 3 channels."

Authors: Ibeh CL,Yiu AJ,Kanaras YL,Paal E,Birnbaumer L,Jose PA,Bandyopadhyay BC

Year
2019

European journal of endocrinology

A novel germline inactivating mutation in the CASR gene in an Italian kindred affected by familial hypocalciuric hypercalcemia.

"PA1-934A was used in western blot to study a novel germline CASR mutation in a case of familial hypocaliuric hypercalcemia in an Italian family"

Authors: Falchetti A,Gozzini A,Terranegra A,Soldati L,Vezzoli G,Leoncini G,Giusti F,Franceschelli F,Masi L,Tanini A, Cavalli L,Brandi ML

Year
2012

Species
Human

Dilution
1:500

View more WB references on thermofisher.com

Immunohistochemistry (6)

Journal of cell science

Evidence for a regulated Ca^{2+} entry in proximal tubular cells and its implication in calcium stone formation.

"PA1-934A was used in Immunohistochemistry to show the existence of a regulated transcellular Ca2+ entry pathway in luminal membrane proximal tubule cells induced by Ca2+ sensing receptor-mediated activation of transient receptor potential canonical 3 channels."

Authors: Ibeh CL,Yiu AJ,Kanaras YL,Paal E,Birnbaumer L,Jose PA,Bandyopadhyay BC

Year
2019

Transplantation proceedings

Decreased parathyroid Klotho expression is associated with persistent hyperparathyroidism after kidney transplantation.

"PA1-934A was used in immunohistochemistry to study persistent hypoparathyroidism in kidney transplant patients and the role of reduced parathyroid expression of Klotho"

Authors: Hong YA,Choi DE,Lim SW,Yang CW,Chang YK

Year
2013

Species
Human

View more IHC references on thermofisher.com

More applications with references on thermofisher.com

IHC (P) (1) **ICC/IF (2)**