

Basic Information

Product Name	Anti-Calcium Sensing Receptor/CASR Antibody (Clone#11E9)
Gene Name	CASR
Source	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Species Reactivity	human
Tested Application	WB, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	E. coli-derived human CASR recombinant protein (Position: Q926-S1078). Human CASR shares 80.5% and 78.6% amino acid (aa) sequence identity with mouse and rat CASR, respectively.
Concentration	500 ug/ml
Purification	protein G purified.
Observed MW	130 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed):1:50-200

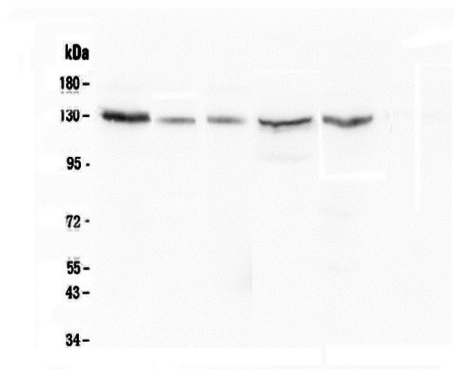
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

The calcium-sensing receptor (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. 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. Mutations in this gene cause familial hypocalciuric hypercalcemia, familial, isolated hypoparathyroidism, and neonatal severe primary hyperparathyroidism.

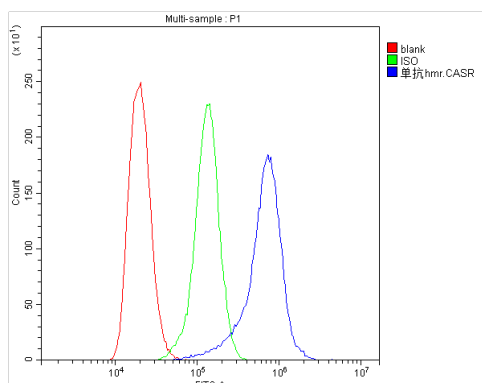
Selected Validation Data



Western blot analysis of anti-Calcium Sensing Receptor/CASR antibody (M00574). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysate,
Lane 2: human A549 whole cell lysate,
Lane 3: human 22RV1 whole cell lysate,
Lane 4: human HepG2 whole cell lysate,
Lane 5: human Caco-2 whole cell lysate.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Calcium Sensing Receptor/CASR antigen affinity purified monoclonal antibody (M00574) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Calcium Sensing Receptor/CASR at approximately 130 kDa. The expected band size for Calcium Sensing Receptor/CASR is at 121 kDa.



Flow Cytometry analysis of Neuro-2a cells using anti-Calcium Sensing Receptor/CASR antibody (M00574).

Overlay histogram showing Neuro-2a cells stained with M00574 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Calcium Sensing Receptor/CASR Antibody (M00574) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.