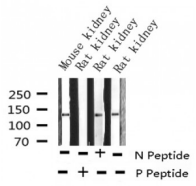
Phospho-Calcium Sensing Receptor (Thr888) Ab

Cat.#: AF3296	Concn.: 1mg/ml	Mol.Wt.: 140kDa
Size: 100ul,200ul	Source: Rabbit	Clonality: Polyclonal

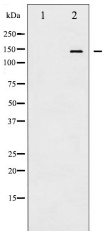
Application:	WB 1:500-1:2000 IF/ICC 1:100-1:500
Reactivity:	Human,Mouse,Rat
Purification:	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Specificity:	Phospho-Calcium Sensing Receptor (Thr888) Ab detects endogenous levels of Calcium Sensing Receptor only when phosphorylated at Threonine 888.
Immunogen:	A synthesized peptide derived from human Calcium Sensing Receptor around the phosphorylation site of Threonine 888.
Uniprot:	P41180
Description:	The calcium-sensing receptor (CASR) functions as a sensor for parathyroid and kidney to determine the extracellular calcium concentration and thus helps to maintain a stable calcium concentration.
Subcellular Location:	Cell membrane.
Tissue Specificity:	Expressed in the temporal lobe, frontal lobe, parietal lobe, hippocampus, and cerebellum. Also found in kidney, lung, liver, heart, skeletal muscle, placenta.
Similarity:	The extracellular regions of the homodimer interact in a side-by-side fashion while facing opposite directions (PubMed:27434672, PubMed:27386547). Each extracellular region consists of three domains, LB1 (ligand-binding 1), LB2 and CR (cysteine-rich) (PubMed:17360426). The two lobe-shaped domains LB1 and LB2 form a venus flytrap module (PubMed:27434672, PubMed:27386547). In the inactive configuration, the venus flytrap modules of both protomers are in the open conformation associated with the resting state (open-open) and the interdomain cleft is empty (PubMed:27434672). In addition, each protomer contains three anions, which reinforce the inactive conformation, and one calcium ion (PubMed:27434672). In the active configuration, both protomers of extracellular regions have the closed conformation associated with agonist-binding (closed-closed) (PubMed:27434672, PubMed:27386547). The ligand-binding cleft of each protomer is solely occupied by an aromatic amino-acid (PubMed:27434672,

PubMed:27386547). Calcium is bound at four novel sites, including one at the homodimer interface (PubMed:27434672, PubMed:27386547). Agonist-binding induces large conformational changes within the extracellular region homodimer: first, the venus flytrap module of each protomer undergoes domain closure (PubMed:27434672, PubMed:27386547). Second, the LB2 regions of the two protomers approach each other, resulting in an expansion of the homodimer interactions involving LB2 domains (PubMed:27434672, PubMed:27386547). Third, the CR regions of the two subunits interact to form a large homodimer interface that is unique to the active state (PubMed:27434672, PubMed:27386547). The CR regions are brought into close contact by the motion involving LB2 since the two domains are rigidly associated within each subunit (PubMed:27434672, PubMed:27386547).Belongs to the G-protein coupled receptor 3 family.

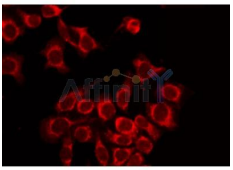
Storage Condition and Buffer: Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



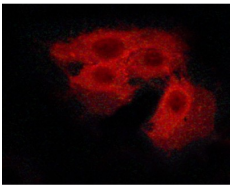
Western blot analysis of Phospho-Calcium Sensing Receptor (Thr888) expression in various lysates



Western blot analysis of Calcium Sensing Receptor phosphorylation expression in LOVO whole cell lysates,The lane on the left is treated with the antigen-specific peptide.



AF3296 staining LOVO by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary Ab.



AF3296 staining Hela cells by ICC/IF. Cells were fixed with PFA and permeabilized in 0.1% saponin prior to blocking in 10% serum for 45 minutes at 37°C. The primary Ab was diluted 1/400 and incubated with the sample for 1 hour at 37°C. A Alexa Fluor 594 conjugated goat polyclonal to rabbit IgG (H+L), diluted 1/600 was used as secondary Ab.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.