Product Datasheet

Calcium-sensing R/CaSR Antibody (5C10, ADD)
NB120-19347

Unit Size: 0.1 mg
Store at -20C. Avoid freeze-thaw cycles.

Publications: 20

Updated 1/5/2021 v.20.1

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**Calcium-sensing R/CaSR Antibody (5C10, ADD)**

**Product Information**

<table>
<thead>
<tr>
<th><strong>Unit Size</strong></th>
<th>0.1 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration</strong></td>
<td>1 mg/ml</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>Store at -20°C. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td><strong>Clonality</strong></td>
<td>Monoclonal</td>
</tr>
<tr>
<td><strong>Clone</strong></td>
<td>5C10, ADD</td>
</tr>
<tr>
<td><strong>Preservative</strong></td>
<td>0.02% Sodium Azide</td>
</tr>
<tr>
<td><strong>Isotype</strong></td>
<td>IgG2a</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Protein A or G purified</td>
</tr>
<tr>
<td><strong>Buffer</strong></td>
<td>PBS</td>
</tr>
</tbody>
</table>

**Product Description**

| **Host** | Mouse |
| **Gene ID** | 846 |
| **Gene Symbol** | CASR |
| **Species** | Human, Mouse, Rat, Porcine, Bovine |

**Reactivity Notes**

Mouse reactivity reported in scientific literature (PMID: 21969374). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information. Porcine reactivity reported in scientific literature (PMID: 27836810).

**Immunogen**

Partial synthetic peptide corresponding to residues 214 - 235 of human calcium sensing receptor R / CaSR [UniProt P41180]

**Product Application Details**

**Applications**

Western Blot, ELISA, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin

**Recommended Dilutions**

Western Blot 2 ug/ml, ELISA 1:100 - 1:2000, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/Immunofluorescence 1:10-1:500, Immunohistochemistry-Paraffin 1:10 - 1:500, Immunohistochemistry-Frozen 1:10 - 1:500

**Application Notes**

IHC-P usage was reported in scientific literature. In Western blot this antibody detects bands at approximately 130 and 150 kDa. We have conflicting data on the use of this antibody in Flow.

**Images**

Western Blot: Calcium-sensing R/CaSR Antibody (5C10, ADD) [NB120-19347] - Total protein from human Hek293 and rat Pancreas was separated on a 7.5% gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 2.0 ug/ml anti-CaSR in block buffer and detected with an anti-mouse HRP secondary antibody using West Pico PLUS chemiluminescence detection reagent.
Immunocytochemistry/Immunofluorescence: Calcium-sensing R/CaSR Antibody (5C10, ADD) [NB120-19347] - Analysis of bovine corneal epithelium (CE) limbus tissue.

Immunohistochemistry-Paraffin: Calcium-sensing R/CaSR Antibody (5C10, ADD) [NB120-19347] - Normal biopsies of deparaffinized Human kidney tissue.

Western Blot: Calcium-sensing R/CaSR Antibody (5C10, ADD) [NB120-19347] - Analysis of calcium sensing receptor in HEK7-2 cell extract.

Immunohistochemistry: Calcium-sensing R/CaSR Antibody (5C10, ADD) [NB120-19347] - Analysis of mouse stomach stained with Calcium Sensing Receptor Monoclonal Antibody. Fresh stomach tissue was fixed in 4% formalin for 1 hour and then incubated overnight at 4C in 25% sucrose before embedding in tissue freezing medium. Antigen retrieval was carried out on 8 um cryo-sections by incubating in sodium citrate buffer for 45 minutes at 4C, immersing in sodium citrate buffer for 10 minutes at 100C before washing 3 times for 5 minutes each in 1X PBS. Sections were then blocked in blocking buffer (0.3% Triton X-100 in 1X PBS containing 10% normal goat serum) for 30 minutes at RT before staining with NB120-19347 (diluted 1:100 in blocking buffer) overnight at 4C followed by a fluorophore-conjugated goat anti-mouse IgG secondary antibody for 2 hours at RT. Sections were also stained with DAPI nuclear stain (blue). NB120-19347 positive cells (green) were found at the base of the antral glands in the mouse stomach. Data courtesy of the Innovators Program.
Immunochemistry-Paraffin: Calcium-sensing R/CaSR Antibody (5C10, ADD) [NB120-19347] - Normal biopsies of deparaffinized Human brain tissue.

**Publications**


Shilo V, Ben-Dov IZ, Nechama M et al. Parathyroid-specific deletion of dicer-dependent microRNAs abrogates the response of the parathyroid to acute and chronic hypocalcemia and uremia FASEB J. 2015 Jun 08 [PMID: 26054367] (IHC-P, Mouse)


**Procedures**

**Western Blot Protocol for Calcium-sensing R/CaSR Antibody (NB120-19347)**

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 10-25 ug of total protein per lane.
2. Transfer proteins to PVDF membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain the membrane with Ponceau S (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot TBS -0.05% Tween 20 (TBST).
5. Block the membrane in 5% Non-fat milk in TBST (blocking buffer) for at least 1 hour.
6. Wash the membrane in TBST three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate overnight at 4°C with gentle rocking.
8. Wash the membrane in TBST three times for 10 minutes each.
9. Incubate the membrane in diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) for 1 hour at room temperature.
10. Wash the blot in TBST three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

**Immunohistochemistry-Paraffin Protocol for Calcium-sensing R/CaSR Antibody (NB120-19347)**

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:
Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes (keep slides in the sodium citrate buffer all the time).

Staining:
1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in PBS for 5 minutes.
3. Block each section with 100-400 ul blocking solution (1% BSA in PBS) for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4°C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul HRP polymer conjugated secondary antibody. Incubate 30 minutes at room temperature.
7. Wash sections three times in wash buffer for 5 minutes each.
8. Add 100-400 ul DAB substrate to each section and monitor staining closely.
9. As soon as the sections develop, immerse slides in deionized water.
10. Counterstain sections in hematoxylin.
11. Wash sections in deionized water two times for 5 minutes each.
12. Dehydrate sections.
Immunocytochemistry/Immunofluorescence Protocol for Calcium-sensing R/CaSR Antibody (NB120-19347)

Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and wash the cells briefly in PBS. Add 10% formalin to the dish and fix at room temperature for 10 minutes.
2. Remove the formalin and wash the cells in PBS.
3. Permeabilize the cells with 0.1% Triton X100 or other suitable detergent for 10 min.
4. Remove the permeabilization buffer and wash three times for 10 minutes each in PBS. Be sure to not let the specimen dry out.
5. To block nonspecific antibody binding, incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
6. Add primary antibody at appropriate dilution and incubate overnight at 4C.
7. Remove primary antibody and replace with PBS. Wash three times for 10 minutes each.
8. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
9. Remove secondary antibody and replace with PBS. Wash three times for 10 minutes each.
10. Counter stain DNA with DAPI if required.
Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

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