Product Datasheet

5-HT7 Antibody
NB100-56352

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

Publications: 11

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
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Updated 8/18/2016 v.20.1
# NB100-56352
5-HT7 Antibody

## Product Information

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Size</td>
<td>0.1 mg</td>
</tr>
<tr>
<td>Concentration</td>
<td>1.0 mg/ml</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Preservative</td>
<td>0.05% Sodium Azide</td>
</tr>
<tr>
<td>Purity</td>
<td>Protein G purified</td>
</tr>
<tr>
<td>Buffer</td>
<td>PBS</td>
</tr>
<tr>
<td>Target Molecular Weight</td>
<td>54 kDa</td>
</tr>
</tbody>
</table>

## Product Description

**Host**
Rabbit

**Gene ID**
3363

**Gene Symbol**
HTR7

**Species**
Human, Mouse, Rat, Canine

**Reactivity Notes**
Predicted to react with Porcine.

**Specificity/Sensitivity**
This sequence is identical for 5-HT7R splice variants in the rat (5-HT7Ra/b/c), human (5-HT7Ra/b/d) and human 5-HT7, the mouse 5-HT7R. It is 93% conserved with dog 5-HT7Ra/b, and 81% conserved with pig 5-HT7R. The 5HT7 antibody recognizes all described 5HT7 receptor splice variants.

**Immunogen**
This antibody was developed by immunizing rabbits with a mixture of synthetic peptides corresponding to amino acids 13-28 of the rat 5-HT7R (AAA42134.1).

## Product Application Details

**Applications**
Western Blot, Immunocytochemistry/Immunofluorescence

**Recommended Dilutions**
Western Blot 1-2 ug/ml, Immunocytochemistry/Immunofluorescence 1:10-1:2000

**Application Notes**
In human brain, a 50 kDa band is observed. Both 45 kDa and 50 kDa bands have been observed in various human glioblastoma cell lines and in the human microglial MC-3 cell lines. Bands in the 45-50 kDa range correspond to the predicted molecular weight for the 5HT7 receptor. The 5HT7 receptor also has putative sites for N-linked glycosylation and phosphorylation which may lead to variations in observed molecular weights. Use in Immunocytochemistry/Immunofluorescence was reported in the literature (PMID: 17940054) The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.
Western Blot: 5-HT7 Antibody [NB100-56352] - Analysis of 5-HT7R in A) human brain, B) mouse brain, C) rat brain, and D) human SK-N-SH neuroblastoma cell lysate using this antibody.

Publications


Details:
5-HT7 antibody used for WB on 30 ug lysate of spinal cord samples /the ipsilateral dorsal spinal cord at L4-L6 obtained from rats that were subjected or not to induce the inflammatory pain via subcutaneous injection of carrageenan (degraded gamma-Carrageenan) at the center of their hind paw (Fig 1).

Speranza L, Giuliano T, Volpicelli F et al. Activation of 5-HT7 receptor stimulates neurite elongation through mTOR, Cdc42 and actin filaments dynamics Front Behav Neurosci 2015 Mar 27 [PMID: 25814944] (WB, ICC/IF, Mouse)

Strekalova E, Profirovic J. Serotonin 5-HT7 Receptor Regulates Endothelial Cell Migration via Protein Kinase A Austin J Pharmacol Ther et al. 2014 Sep 25 (WB, Human)

Details:
Rabbit polyclonal anti-5-HT7R antibody used for WB on lysate of HUVEC cells (Figure 1B)

Leon-Ponte M, Ahern GP, O’Connell PJ. Serotonin provides an accessory signal to enhance T-cell activation by signaling through the 5-HT7 receptor. Blood. 2007 Apr 15 [PMID: 17158224] (WB, Mouse)

Details:
WB (mouse brain and hypothalamus tissue, mouse T cells purified from spleen, Fig 2): IMG-366 (5-HT1BR) and IMG-368 (5-HT7R). Note: Levels of 5-HT1BR and 5-HT7R increased following T-cell activation by Con A.


Details:
WB: Fig 3a (untransfected CHO cells/CHO cells transfected with the human 5-HT7aR), Fig 3b (untransfected CHO cells, human microglial MC-3 cells). Notes: Two bands of ~45 and 50 kDa were seen in the 5-HT7aR tably transfected cells and the MC-3 cells. These


Details:
Product cited: Serotonin 5-HT7 Receptor (IMG-368), Mouse Brain Tissue Lysate (40101), & Human Brain Tissue Lysate (40141). 1. WB: Human MCF10A mammary epithelial cells, mouse primary mammary epithelial cells (mPMEC), human brain (40141), & mouse brain (40

Details:
WB (Fig 3), 5-HT7aR stably transfected/untransfected CHO cells, human glioblastoma cell lines (T98G, H4 cells; U-373 MG; U-138 MG, DBTRG-05MG, U-87 MG, Hs 683, CCF-STTG1). Notes: Two bands of ~45 and 50 kDa were seen in the 5-HT7a R stably transfected cel


Details:
WB (human mammary MCF10A cells), Fig. 1C.


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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