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.

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Publications: 22

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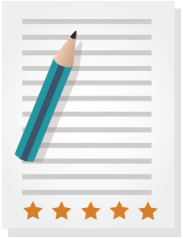
Updated 12/20/2023 v.20.1



NB100-56352

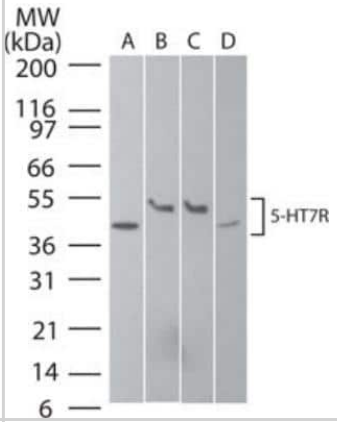
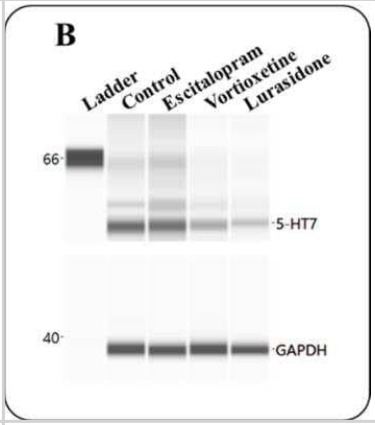
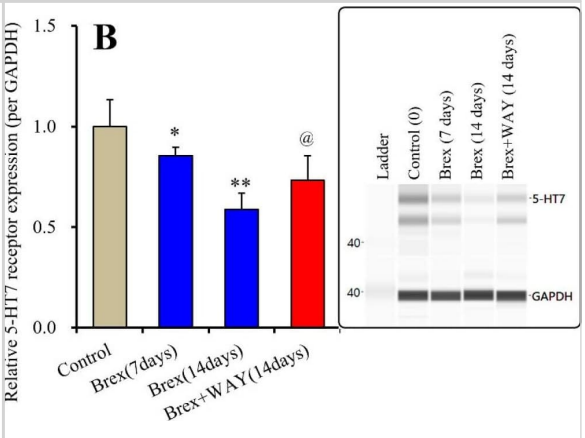
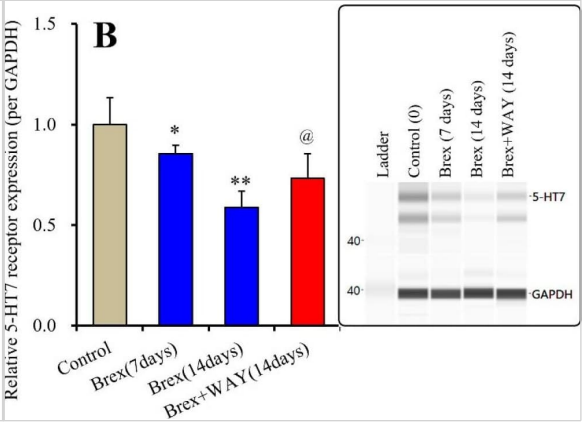
5-HT7 Antibody

Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	54 kDa

Product Description	
Host	Rabbit
Gene ID	3363
Gene Symbol	HTR7
Species	Human, Mouse, Rat, Canine
Reactivity Notes	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 canine 5-HT7Ra/b, and 81% conserved with porcine 5-HT7R.
Specificity/Sensitivity	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, Simple Western, Flow Cytometry, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 1-2 ug/ml, Simple Western, Flow Cytometry reported in scientific literature (PMID 30602786), Immunocytochemistry/ Immunofluorescence 1:10-1:2000. Use reported in scientific literature (PMID 17940054)

Images

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.	
Simple Western: 5-HT7 Antibody [NB100-56352] - Panel (B) indicates the pseudo-gel images using capillary immunoblotting. * p < 0.05, ** p < 0.01 vs. the control by Student's t-test. Image collected and cropped by CiteAb from the following publication (h//pubmed.ncbi.nlm.nih.gov/33572981/) licensed under a CC-BY license.	
Western Blot: 5-HT7 Antibody [NB100-56352] - Effects of subchronic administration (7 and 14 days) of therapeutic relevant concentration of Brex (Brex: 300 nM) and interaction between Brex and 5-HT1A receptor (5-HT1AR) antagonist WAY100635 (WAY: 10 uM) on protein expression of 5-HT7 receptor in the plasma membrane fraction of cortical primary cultured astrocytes. In left side histograms, ordinate: mean +/- SD (n = 6) of the relative protein level of 5-HT7R per GAPDH. * p < 0.05, ** p < 0.01: relative to control (Brex-free) by one-way analysis of variance (ANOVA) with Tukey's post-hoc test, and @ p < 0.05: relative to Brex for 14 days by Student's T-test. Right side panels indicate their pseudo-gel images using capillary immunoblotting. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/35743014/) licensed under a CC-BY license.	
Mapping the PRDX2 and PRDX4 binding domains of HIF-1αA. and B. HeLa cells were transfected with PRDX2-V5 (A) or PRDX4-V5 (B) vector and WCL was incubated with purified GST or GST-HIF-1α fusion protein in the presence of glutathione-Sepharose beads, followed by immunoblot assays with anti-V5 antibody (upper panels) or Ponceau S staining (lower panels). Image collected and cropped by CiteAb from the following open publication (https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.7142), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Publications

Yang JS, Gao FF, Yang XX et al. The 5-HT7 receptors in the VLO contribute to the development of morphine-induced behavioral sensitization in rats Neurochemistry international 2023-06-18 [PMID: 37339717] (WB, Rat)

Details:
1:100 dilution

Okada M, Fukuyama K, Motomura E Dose-Dependent Biphasic Action of Quetiapine on AMPK Signalling via 5-HT7 Receptor: Exploring Pathophysiology of Clinical and Adverse Effects of Quetiapine International journal of molecular sciences 2022-08-14 [PMID: 36012369] (Simple Western, Rat)

Details:
Dilution used 1:300

Fukuyama K, Motomura E, Okada M Brexpiprazole Reduces 5-HT7 Receptor Function on Astroglial Transmission Systems International journal of molecular sciences 2022-06-12 [PMID: 35743014] (Simple Western, WB, Rat)

Fukuyama K, Motomura E, Shiroyama T, Okada M Impact of 5-HT7 receptor inverse agonism of lurasidone on monoaminergic tripartite synaptic transmission and pathophysiology of lower risk of weight gain Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie 2022-02-24 [PMID: 35219120] (WB, Rat)

Chaudhary P, Guragain D, Chang J, Kim J TPH1 and 5-HT7 Receptor Overexpression Leading to Gemcitabine-Resistance Requires Non-Canonical Permissive Action of EZH2 in Pancreatic Ductal Adenocarcinoma Cancers 2021-10-22 [PMID: 34771469] (WB, Human)

Okada M, Matsumoto R, Yamamoto Y, Fukuyama K Effects of Subchronic Administrations of Vortioxetine, Lurasidone, and Escitalopram on Thalamocortical Glutamatergic Transmission Associated with Serotonin 5-HT7 Receptor International journal of molecular sciences 2021-01-29 [PMID: 33572981] (WB, Rat)

Tempio A, Niso M, Laera L et al. Mitochondrial Membranes of Human SH-SY5Y Neuroblastoma Cells Express Serotonin 5-HT7 Receptor International journal of molecular sciences 2020-12-17 [PMID: 33348850] (WB, Human)

Volpicelli F, Speranza L, Pulcrano S et al. The microRNA-29a Modulates Serotonin 5-HT7 Receptor Expression and Its Effects on Hippocampal Neuronal Morphology Mol. Neurobiol. 2019-07-10 [PMID: 31292861] (WB, Mouse)

Ito M, Komai K, Mise-Omata S Brain regulatory T cells suppress astrogliosis and potentiate neurological recovery Nature 2019-01-02 [PMID: 30602786] (FLOW, Mouse)

Wixey JA, Reinebrant HE, Chand KK, Buller KM. Disruption to the 5-HT7 Receptor Following Hypoxia-Ischemia in the Immature Rodent Brain Neurochem. Res. 2018-01-22 [PMID: 29357019] (WB, Rat)

Gautam J, Banskota S, Regmi SC et al. Tryptophan hydroxylase 1 and 5-HT7 receptor preferentially expressed in triple-negative breast cancer promote cancer progression through autocrine serotonin signaling. Mol. Cancer. 2016-11-21 [PMID: 27871326] (WB, Human)

Holst K, Guseva D, Schindler S et al. Serotonin receptor 5-HT7 regulates morphology and migratory properties of dendritic cells J. Cell. Sci. 2015-06-19 [PMID: 26092936] (ICC/IF, Mouse)

More publications at http://www.novusbio.com/NB100-56352

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Products Related to NB100-56352

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
H00003363-Q01-10ug	Recombinant Human 5-HT7 GST (N-Term) Protein

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.

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