

#### International Office

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# EB06905 - Goat Anti-Histamine Receptor H2 Antibody

Size: 100µg specific antibody in 200µl



# **Target Protein**

Principal Names: HRH2, histamine receptor H2, HGNC:5183, H2R, gastric receptor 1,

OTTHUMP00000161242 **Official Symbol:** HRH2

Accession Number(s): NP\_001124527.1; NP\_001354640.1

Human GeneID(s): 3274

# **Immunogen**

Peptide with sequence C-QEEKPLKLQVWSGTE, from the C Terminus of the protein sequence according to NP\_001124527.1; NP\_001354640.1.

Please note the peptide is available for sale.

# **Purification and Storage**

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Aliquot and store at -20°C. Minimize freezing and thawing.

# **Applications Tested**

Peptide ELISA: antibody detection limit dilution 1:32000.

**Western blot:** Approx 50kDa band observed in Human Tonsil lysates (calculated MW of 46.9kDa according to Human NP\_001354640.1). Recommended concentration: 1-3μg/ml. Primary incubation 1 hour at room temperature.

**Immunofluorescence:** Strong expression of the protein seen in the cytoplasm of HeLa cells. Recommended concentration: 10µg/ml.

**Flow Cytometry:** Flow cytometric analysis of HeLa cells. Recommended concentration: 10ug/ml.

# **Species Reactivity**

Tested: Human

Expected from sequence similarity: Human, Mouse, Rat, Dog

## **Specific References**

# This antibody (previous batch) has been successfully used in IHC on Mouse:

Meghan Van Zandt, Christopher Pittenger

Sexual dimorphism in histamine regulation of striatal dopamine

bioRxiv [Preprint]. 2025 Feb 28:2024.05.20.595049.

PMID: 38826392

#### This antibody (previous batch) has been successfully used in the following paper:

Zeng-Xin Qi, Kang-Li Shen, Jian-Ya Peng, Xiu-Juan Fan, Hui-Wei Huang, Jian-Lan Jiang, Jian-Hua Lu, Xiao-Qin Wang, Xiao-Xia Fang, Liang Chen, Qian-Xing Zhuang

Histamine bidirectionally regulates the intrinsic excitability of parvalbumin-positive neurons in the lateral globus pallidus and promotes motor behaviour.

Br J Pharmacol. 2023 May;180(10):1379-1407.

PMID: 36512485

#### This antibody (previous batch) has been successfully used in WB on Mouse:

Giuseppe Aceto, Luca Nardella, Simona Nanni, Valeria Pecci, Alessia Bertozzi, Claudia Colussi, Marcello D'Ascenzo, Claudio Grassi

Activation of histamine type 2 receptors enhances intrinsic excitability of medium spiny neurons in the nucleus accumbens

J Physiol. 2022 Mar 28. doi: 10.1113/JP282962.

PMID: 35343587

#### This antibody (previous batch) has been successfully used in IF on Rat:

Miao-Jin Ji, Xiao-Yang Zhang, Xiao-Chun Peng, Yang-Xun Zhang, Zi Chen, Lei Yu, Jian-Jun Wang, Jing-Ning Zhu

Histamine Excites Rat GABAergic Ventral Pallidum Neurons via Co-activation of H1 and H2 Receptors

Neurosci Bull. 2018 Dec;34(6):1029-1036.

PMID: 30143981

#### This antibody (previous batch) has been successfully used in IF on Rat:

Qian-Xing Zhuang & Han-Ting Xu & Xu-Juan Lu & Bin Li & Wing-Ho Yung & Jian-Jun Wang & Jing-Ning Zhu

Histamine Excites Striatal Dopamine D1 and D2 Receptor-Expressing Neurons via Postsynaptic H1 and H2 Receptors

Mol Neurobiol. 2018 Oct;55(10):8059-8070.

PMID: 29498008

# This antibody (previous batch) has been successfully used in IHC on Rat:

Zhuang QX, Li GY, Li B, Zhang CZ, Zhang XY, Xi K, Li HZ, Wang JJ, Zhu JN.

Regularizing firing patterns of rat subthalamic neurons ameliorates parkinsonian motor deficits.

J Clin Invest. 2018 Sep 18.

PMID: 30226827

#### This antibody (previous batch) has been successfully used in IF on Rat:

Bin Li, Xiao-Yang Zhang, Ai-Hong Yang, Xiao-Chun Peng, Zhang-Peng Chen, Jia-Yuan Zhou, Ying-Shing Chan, Jian-Jun Wang and Jing-Ning Zhu.

Histamine Increases Neuronal Excitability and Sensitivity of the Lateral Vestibular Nucleus and Promotes Motor Behaviors via HCN Channel Coupled to H2 Receptor.

Front Cell Neurosci. 2017 Jan 10;10:300.

PMID: 28119568

# This antibody (previous batch) has been successfully used in IF on Rat:

Zhang J, Zhuang QX, Li B, Wu GY, Yung WH, Zhu JN, Wang JJ.

Selective Modulation of Histaminergic Inputs on Projection Neurons of Cerebellum Rapidly Promotes Motor Coordination via HCN Channels.

Mol Neurobiol. 2016 Mar;53(2):1386-401.

PMID: 25633097

## This antibody (previous batch) has been successfully used in IF on Rat:

Zhang XY, Yu L, Zhuang QX, Peng SY, Zhu JN, Wang JJ.

Postsynaptic mechanisms underlying the excitatory action of histamine on medial vestibular nucleus neurons in rats.

Br J Pharmacol. 2013 Sep;170(1):156-69.

PMID: 23713466

#### This antibody (previous batch) has been successfully used in IF on Rat:

Peng SY, Zhuang QX, He YC, Zhu JN, Wang JJ.

Histamine excites neurons of the inferior vestibular nucleus in rats by activation of H1 and H2 receptors.

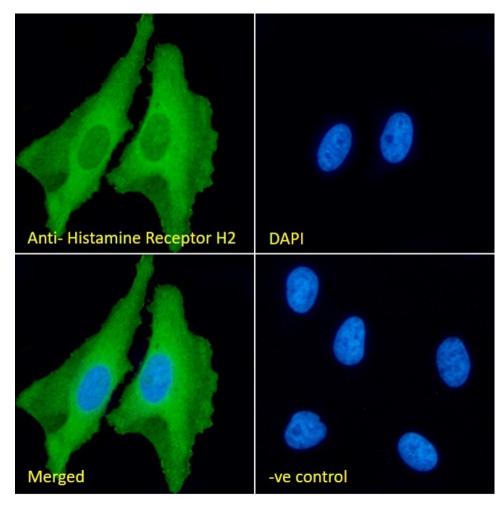
Neurosci Lett. 2013 Apr 29;541:87-92.

PMID: 23466693

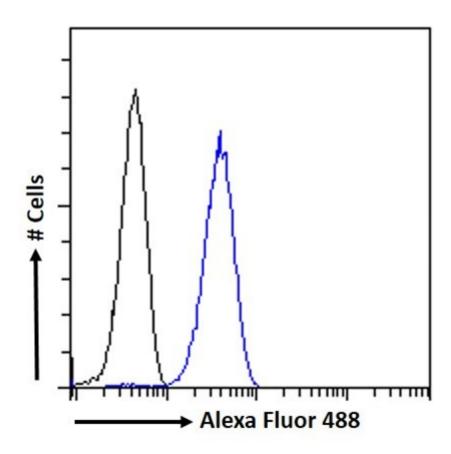
250kDa 150kDa 100kDa 75kDa 50kDa 37kDa 25kDa

15kDa

EB06905 (2µg/ml) staining of Human Tonsil lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB06905 Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



EB06905 Flow cytometric analysis of paraformaldehyde fixed HeLa cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control:

Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.