

## **International Office**

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### EB07069-T - Goat Anti-GAPDH (Internal) Antibody - Trial

Size: 20µg specific antibody in 40µl

# Plus lite

# **Target Protein**

Principal Names: GAPDH, glyceraldehyde-3-phosphate dehydrogenase, HGNC:4141, G3PD, GAPD, MGC88685, aging-associated gene 9 protein, glyceraldehyde 3-phosphate dehydrogenase, epididymis secretory sperm binding protein Li 162eP, HEL-S-162eP, peptidyl-cysteine S-nitrosylase GAPDH Official Symbol: GAPDH Accession Number(s): NP\_002037.2; NP\_001243728.1 Human GenelD(s): 2597 Non-Human GenelD(s): 14433 (mouse), 24383 (rat) Important Comments: This antibody is expected to recognize both reported isoforms (NP\_002037.2; NP\_001243728.1). Reported variants represent identical protein:

NP\_001276674.1, NP\_002037.2, NP\_001276675.1. GAPDH is constitutively expressed in almost all tissues at high levels. It is therefore a useful marker when a loading/positive control is required in western blotting.

### Immunogen

Peptide with sequence C-GVNHEKYDNSLK, from the internal region of the protein sequence according to NP\_002037.2; NP\_001243728.1.

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 1:16000.

**Western blot:** Approx 37kDa band observed in Human Liver, Testis and Tonsil, and in Mouse Liver and Rat Heart lysates, and in cell lysates of HeLa and NIH3T3 (calculated MW of 36.1kDa according to Human NP\_002037.2, Mouse NP\_032110.1, and Rat NP\_058704.1). Recommended concentration: 0.03-0.1µg/ml. Primary incubation 1 hour at room temperature. This product has been successfully used in WB on Human: PMID: 29953622, PMID: 29158223 and https://doi.org/10.1101/2022.01.21.477266, and in WB on Rat: PMID: 31087788 and 34584880.

**IHC:** In paraffin embedded Human Liver shows textured cytoplasm staining in hepatocytes. Recommended concentration: 2µg/ml.

**Immunofluorescence:** Strong expression of the protein seen in the cytoplasm of U251 and HeLa cells. Recommended concentration: 5-10µg/ml.

# **Species Reactivity**

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

# **Specific References**

This antibody has been successfully used in Western blot on Human: Salman Tamaddon-Jahromi, Kate Murphy, William Walker and Venkateswarlu Kanamarlapudi EFA6R suppresses ovarian cancer cell migration and invasion https://doi.org/10.1101/2022.01.21.477266 PMID: 0

#### This antibody has been successfully used in Western blot on Rat:

Jintao Zheng, Shibo Zhu, Huiyu Xu, Jiequan Li, Huajian Tang, Yanfen Zhou, Zhaomei Huang, Guoqing Liu

miR-363-3p inhibits rat lung alveolar type II cell proliferation by downregulating STRA6 expression and induces cell apoptosis via cellular oxidative stress and G1-phase cell cycle arrest

Transl Pediatr. 2021 Aug; 10(8): 2095–2105. PMID: 34584880

#### This antibody has been successfully used in the following paper:

von Achenbach C, Silginer M, Blot V, Weiss WA, Weller M Depatuxizumab mafodotin (ABT-414)-induced glioblastoma cell death requires EGFR overexpression, but not EGFRY1068 phosphorylation.

Mol Cancer Ther. 2020 May 5. pii: molcanther.0609.2019. PMID: 32371586

#### This antibody has been successfully used in Western blot on Rat:

Zheng J, He Q, Tang H, Xia H miR**I**455**I**5p Overexpression Reduces Rat Lung Alveolar Type II Cell Proliferation by Downregulating STRA6 Anat Rec (Hoboken). 2019 May 14. PMID: 31087788

# This antibody (previous batch) has been successfully used in Western blot on Human:

Meier K, Jaguva Vasudevan AA, Zhang Z, Bähr A, Kochs G, Häussinger D, Münk C Equine MX2 is a restriction factor of equine infectious anemia virus (EIAV) Virology. 2018 Oct;523:52-63. doi: 10.1016/j.virol.2018.07.024 PMID: 30081309

#### This antibody has been successfully used in Western blot on Human:

von Achenbach C, Weller M, Szabo E.

Epidermal growth factor receptor and ligand family expression and activity in glioblastoma. J Neurochem. 2018 Jun 28.

PMID: 29953622

#### This antibody has been successfully used in the following paper:

Happold C, Stojcheva N, Silginer M, Weiss T, Roth P, Reifenberger G, Weller M. Transcriptional control of O6 -methylguanine DNA methyltransferase expression and temozolomide resistance in glioblastoma. J Neurochem. 2018 Mar;144(6):780-790 PMID: 29480969

### This antibody has been successfully used in Western blot on Human:

Elisa Ventura, Michael Weller, Will Macnair, Katja Eschbach, Christian Beisel, Cinzia Cordazzo, Manfred Claassen, Luciano Zardi and Isabel Burghardt TGF- $\beta$  induces oncofetal fibronectin that, in turn, modulates TGF- $\beta$  superfamily signaling in endothelial cells J Cell Sci. 2018 Jan 9;131(1).

5 Cell Sci. 2010 Jail 9,15

PMID: 29158223

# This antibody (previous batch) has been successfully used in Western blot on Human:

Carr AJ, Vugler AA, Yu L, Semo M, Coffey P, Moss SE, Greenwood J.

The expression of retinal cell markers in human retinal pigment epithelial cells and their augmentation by the synthetic retinoid fenretinide. Mol Vis. 2011;17:1701-15. PMID: 21738400

# This antibody (previous batch) has been successfully used in Western blot on Human:

Carr AJ, Vugler A, Lawrence J, Chen LL, Ahmado A, Chen FK, Semo M, Gias C, da Cruz L, Moore HD, Walsh J, Coffey PJ.

Molecular characterization and functional analysis of phagocytosis by human embryonic stem cell-derived RPE cells using a novel human retinal assay.

Mol Vis. 2009;15:283-95.

PMID: 19204785

# This antibody (previous batch) has been successfully used in the following paper: Vugler A, Carr AJ, Lawrence J, Chen LL, Burrell K, Wright A, Lundh P, Semo M, Ahmado A, Gias C, da Cruz L, Moore H, Andrews P, Walsh J, Coffey P.

Elucidating the phenomenon of HESC-derived RPE: anatomy of cell genesis, expansion and retinal transplantation.

Exp Neurol. 2008 Dec;214(2):347-61.

PMID: 18926821



EB07069 (0.1µg/ml) staining of Human Liver (A), (0.03ug/ml) Testes (B) and Tonsil (C) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB07069 (0.1µg/ml) staining of Mouse Liver (A) and (0.03ug/ml) Rat Heart (B) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB07069 (0.03µg/ml) staining of HeLa (A) and NIH3T3 (B) cell lysate (35µg protein in RIPA buffer). Detected by chemiluminesce



EB07069 (2µg/ml) staining of paraffin embedded Human Liver. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.



EB07069 Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (5ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic and plasma membrane staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (5ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



EB07069 Immunofluorescence analysis of paraformaldehyde fixed U251 cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing cytoplasmic and vesicle staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).