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EB06377-T - Goat Anti-GAPDH (C Terminus) Loading Control Antibody - Trial

Size: 20µg specific antibody in 40µl



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

Human GeneID(s): <u>2597</u>

Important Comments: 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-HQVVSSDFNSDT, from the C Terminus of the protein sequence according to NP_002037.2.

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 1:4000.

Western blot: Approx. 37kDa band observed in lysates of cell lines HEK293 and HeLa, and in Human Liver and Mouse Spleen lysates (calculated MW of 36.1kDa according to Human NP_002037.2, and 35.8kDa according to Mouse NP_032110.1). Recommended concentration: 0.1-1µg/ml. Primary incubation 1 hour at room temperature. **IHC:** Paraffin embedded Human Lung. Recommended concentration: 5-6µg/ml.

Immunofluorescence: Strong expression of the protein seen in the cytoplasm, membranes and cytoplasmic bodies of A549 cells. Recommended concentration: 10µg/ml.

Species Reactivity

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

Specific References

This antibody (previous batch) has been successfully used in Western blot on Drosophila: George J, Jacobs HT Germline knockdown of spargel (PGC-1) produces embryonic lethality in Drosophila. Mitochondrion. 2019 Aug 29;49:189-199 PMID: 31473309

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

Jack George & Howard T. Jacobs

Minimal effects of spargel (PGC-1 α) overexpression in a Drosophila mitochondrial disease model

bioRxiv 529545; doi: https://doi.org/10.1101/529545 (2019) PMID: 31292108

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

Ananda Ayyappan Jaguva Vasudevan, Ulrike Kreimer, Wolfgang A Schulz, Aikaterini Krikoni, Gerald G Schumann, Dieter Häussinger, Carsten Münk, Wolfgang Goering APOBEC3B Activity Is Prevalent in Urothelial Carcinoma Cells and Only Slightly Affected by LINE-1 Expression

Front Microbiol. 2018 Sep 4;9:2088.

PMID: 30233553

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

Cagri Yalgin, Bohdana Rovenko, Ana Andjelkovi**■**, Margot Neefjes, Burak Oymak, Eric Dufour, Ville Hietakangas & Howard T. Jacobs

Effects on dopaminergic neurons are secondary in COX-deficient locomotor dysfunction in Drosophila

https://ssrn.com/abstract=3600553 (3rd June 2020)

PMID: 0

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

Krzysztof Sikorski, Adi Mehta, Marit Inngjerdingen, Flourina Thakor, Simon Kling, Tomas Kalina, Tuula A. Nyman, Maria Ekman Stensland, Wei Zhou, Gustavo A. De Souza, Lars Holden, Jan Stuchly, Markus Templin and Fridtjof Lund-Johansen

A high-throughput pipeline for validation of antibodies

Nat Methods. 2018 Nov;15(11):909-912 PMID: 30377371

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

Osei Kuffour E, Schott K, Jaguva Vasudevan AA, Holler J, Schulz WA, Lang PA, Lang KS, Kim B, Häussinger D, König R, Münk C

USP18 (UBP43) Abrogates p21-Mediated Inhibition of HIV-1

J Virol. 2018 Sep 26;92(20). pii: e00592-18

PMID: 30068654

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

Jaguva Vasudevan AA, Bähr A, Grothmann R, Singer A, Häussinger D, Zimmermann A, Münk C.

MXB inhibits murine cytomegalovirus

Virology. 2018 Sep;522:158-167.

PMID: 30032029

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

Hain A, Krämer M, Linka RM, Nakhaei-Rad S, Ahmadian MR, Häussinger D, Borkhardt A, Münk C.

IL-2 Inducible Kinase ITK is Critical for HIV 1 Infection of Jurkat T-cells. Sci Rep. 2018 Feb 16;8(1):3217. PMID: 29453458

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

Scialo F, Sriram A, Stefanatos R, Sanz A. Practical Recommendations for the Use of the GeneSwitch Gal4 System to Knock-Down Genes in Drosophila melanogaster. PLoS One. 2016 Aug 29;11(8) PMID: 27570965

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

Happold C, Roth P, Silginer M, Florea AM, Lamszus K, Frei K, Deenen R, Reifenberger G, Weller M.

Interferon- β induces loss of spherogenicity and overcomes therapy resistance of glioblastoma stem cells.

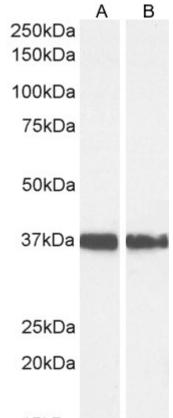
Mol Cancer Ther. 2014 Apr;13(4):948-61.

PMID: 24526161

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

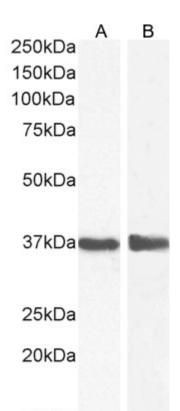
Happold C, Roth P, Wick W, Schmidt N, Florea AM, Silginer M, Reifenberger G, Weller M. Distinct molecular mechanisms of acquired resistance to temozolomide in glioblastoma cells.

J Neurochem. 2012 May 7. doi: 10.1111/j.1471-4159.2012.07781.x. PMID: 22564186



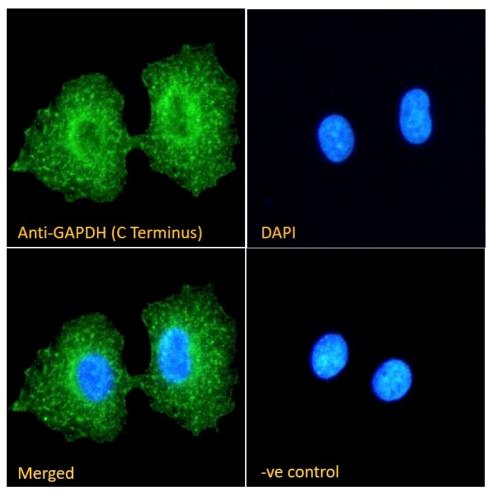


EB06377 (0.1µg/ml) staining of HEK293 (A) and HeLa (B) cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

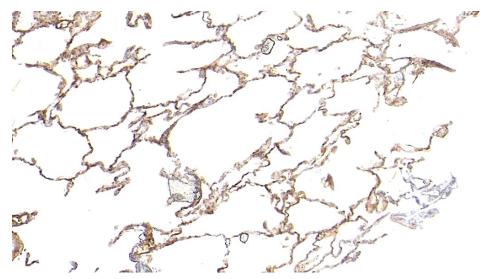


15kDa

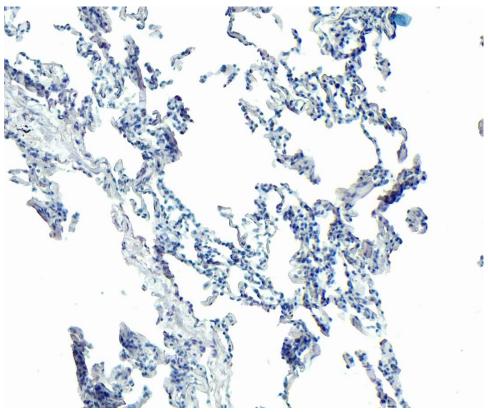
EB06377 (0.1µg/ml) staining of Human Liver (A) and (1ug/ml) Mouse Spleen (B) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB06377 Immunofluorescence analysis of paraformaldehyde fixed A549. Primary incubation 1hr (1:50 dilution) followed by Alexa Fluor® 488 secondary antibody (1:2000 dilution), showing cytoplasmic, membrane and cytoplasmic bodies staining. The nuclear stain is DAPI (blue). Negative control: Anti-Goat IgG followed by Alexa Fluor® 488 secondary antibody.



EB06377 (5µg/ml) staining of paraffin embedded Human Lung. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



EB06377 Negative Control showing staining of paraffin embedded Human Lung, with no primary antibody.