UK Office

Everest Biotech Ltd
Cherwell Innovation Centre
77 Heyford Park
Upper Heyford
Oxfordshire
OX25 5HD
UK

Enquiries:
info@everestbiotech.com
Sales:
sales@everestbiotech.com
Tech support:
support@everestbiotech.com

Tel: +44 (0)1869 238326

www.everestbiotech.com

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

Size: 100µg specific antibody in 200µl

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): 2597
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 1:128000.
Western blot: Approx 36kDa band observed in lysates of cell line HEK293, approx. 37kDa in Rat Brain lysates and approx.35kDa in Human Liver and Tonsil lysates, lysates of cell line HeLa and in preliminary testing of Mouse Spleen lysates (calculated MW of 36.1kDa according to Human NP_002037.2 and 35.8kDa according to Rat NP_058704.1). Recommended concentration: 0.001-0.003µg/ml. Primary incubation 1 hour at room temperature.
IHC: Paraffin embedded Human Pancreas. Recommended concentration: 2.5µg/ml.

Immunofluorescence: Strong expression of the protein seen in the cytoplasm and vesicles of A549 and HeLa cells. Recommended concentration: 10µg/ml.

Species Reactivity

Tested: Human, Rat
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-1α) 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

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

Kiepe D, Van Der Pas A, Ciarmatori S, Ständker L, Schütt B, Hoeflich A, Hügel U, Oh J, Tönshoff B.
Defined carboxy-terminal fragments of insulin-like growth factor (IGF) binding protein 2 exert similar mitogenic activity on cultured rat growth plate chondrocytes as IGF-I.
Endocrinology. 2008 Oct;149(10):4901-11.
PMID: 18556354

EB06377 (0.001µg/ml) staining of HEK293 (A) and HeLa (B) cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

EB06377 (0.001µg/ml) staining of Human Liver (A), Tonsil (B) and (0.3ug/ml) Rat Brain (C) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence

EB06377 Immunofluorescence analysis of paraformaldehyde fixed A549 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).

EB06377 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 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).

EB06377 (2.5µg/ml) staining of paraffin embedded Human Pancreas. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.