

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

Research Use Only. Not for diagnostic or therapeutic use.

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): <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 1:128000.

Western blot: Approx 37kDa band observed in lysates of cell lines HEK293 and HeLa, and in Human Liver and Tonsil, Mouse Liver and Rat Brain lysates (calculated MW of 36.1kDa according to Human NP_002037.2, Mouse NP_032110.1, and Rat NP_058704.1). Recommended concentration: 0.01-0.5ug/ul. Primary incubation was 1 hour.

IHC: Paraffin embedded Human Kidney. Recommended concentration: 5µg/ml.

Immunofluorescence: Strong expression of the protein seen in the cytoplasm of HeLa cells. Recommended concentration: 5µg/ml.

Species Reactivity

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

Specific References

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

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

EB06377 Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (5ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml), showing cytoplasmic staining. The nuclear stain is DAPI (blue).

EB06377 (0.5µg/ml) staining of Mouse Liver (A) and Rat Brain (B) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

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

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