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# EB07069 - Goat Anti-GAPDH (Internal) 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; 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.

**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 HeLa cells. Recommended concentration: 5µg/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 in 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 has been successfully used in Western blot in 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 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).