



Goat Anti-Human GAPDH (C-Terminal)

CatNo

LAH1064

polyclonal

BatchNo:
Despatch Date:
Storage: 2-8°C for 1 month
-20°C for longer

Volume/Quantity:	0.1 mg
Product Form:	Purified IgG - liquid
Antiserum Preparation:	Antisera to human GAPDH (CT) were raised by repeated immunisations of goat with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer:	TRIS buffered saline
Preservatives Stabilisers:	0.02% Sodium Azide (NaN ₃) 0.5% Bovine Serum Albumin (BSA)
Approx. Protein Concentrations:	IgG concentration 0.5 mg/ml
Immunogen:	Peptide sequence C-HQVVSSDFNSDT corresponding to the C-terminal region of GAPDH (NP_002037.2).
Host:	Goat
Specificity:	LAH1064 recognises an epitope within the C-terminal (CT) region of glyceraldehyde-3-phosphate dehydrogenase (GAPDH), a 36kD multifunctional protein whose main function is to catalyse the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate, in conjunction with inorganic phosphate and nicotinamide adenine dinucleotide (NAD). This reaction is an important energy yielding step in carbohydrate metabolism. GAPDH has also been shown to translocate to the nucleus under a variety of stressors, most of which are associated with oxidative stress, whereby it mediates cell death. A further report has shown that GAPDH binds to several proteins that are responsible for neurodegenerative diseases, such as amyloid precursor protein and Huntingtin.
Species Cross Reactivity:	Human, mouse, rat and pig. Based on sequence similarity, is expected to react with: Dog N.B. Antibody reactivity and working conditions may vary between species.

Applications:	Suggested Working Dilution	
FlowCytometry	Not tested	
Immunohistology-frozen	Not tested	
Immunohistology-paraffin *	Yes	0.3µg/ml
Immunohistology-resin	Not tested	
ELISA	Yes	1/2000
Immunoprecipitation	Not tested	
Western Blotting	Yes	0.01 - 0.03µg/ml
Radioimmunoassay	Not tested	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

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Immunohistology

Pre-treatment:	*This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. TRIS/EDTA buffer pH9.0 is recommended for this purpose.
Positive Control Tissue:	Human tonsil
Recommended Secondary Reagents:	Rabbit anti-goat IgG HRP conjugate - (LINARIS CatNo LST0122P) ABC-Kit goat IgG-POD Labelling (LINARIS CatNo EDP4005) DAB-Substrate for POD (LINARIS CatNo E108) or HistoGreen-Substrate for POD (LINARIS CatNo E109) ABC-Kit goat IgG AP Labelling (LINARIS CatNo EDA5005) BCIP/NBT Substrate for AP (LINARIS CatNo ESA5400)

Westernblotting

Important Comments:	LAH1064 detects a band of approximately 35kDa in human tonsil, mouse spleen and HeLa cell lysates. 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.
Weight Standard:	Biotinylated protein molecular weight marker (LINARIS CatNo RPB1400). Molecular weight range from 19kD to 222kD.

References

1. Hara, M.R. et al. (2006) GAPDH as a sensor of NO stress. *Biochim. Biophys. Acta.* 1762: 502-509.
2. Mazzola, J.L. and Sirover, M.A (2001) Reduction of glyceraldehyde-3-phosphate dehydrogenase activity in Alzheimer's disease and in Huntington's disease fibroblasts. *J. Neurochem.* 76: 442-449.

Storage Conditions:	Store at 2-8°C for one month or at -20°C for longer! Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life:	12 months from date of despatch.
Health and Safety Information:	(A full Health and Safety assessment is available upon request) This product contains sodium azide: a POISONOUS and HAZARDOUS SUBSTANCE which should be handled by trained staff only.

LAH1064 130516-2/2

For Research purposes only. Not for therapeutic or diagnostic use.