

# Datasheet for ABIN7504953

# GAPDH Protein (AA 1-333) (His tag)



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Quantity:	100 μg
Target:	GAPDH
Protein Characteristics:	AA 1-333
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This GAPDH protein is labelled with His tag.
Application:	Immunogen (Imm)

### **Product Details**

Sequence:	Met1-Glu333	
Characteristics:	A DNA sequence encoding the Human GAPDH (P04406) (1M-333E) was expressed with a	
	polyhistidine tag at the N-terminus.	
Purity:	> 90 % as determined by reducing SDS-PAGE.	

## Target Details

Target:	GAPDH
Alternative Name:	GAPDH (GAPDH Products)
Background:	Abbreviation: GAPDH
	Target Synonym: Aging associated gene 9 protein, Epididymis secretory sperm binding protein
	Li 162eP,G3P,G3PD,G3PDH,GAPD,GAPDH,Glyceraldehyde 3 phosphate

dehydrogenase, Glyceraldehyde-3-phosphate dehydrogenase, HELS 162eP, Peptidyl-cysteine S-nitrosylase GAPDH

Background: Has both glyceraldehyde-3-phosphate dehydrogenase and nitrosylase activities, thereby playing a role in glycolysis and nuclear functions, respectively. Participates in nuclear events including transcription, RNA transport, DNA replication and apoptosis. Nuclear functions are probably due to the nitrosylase activity that mediates cysteine S-nitrosylation of nuclear target proteins such as SIRT1, HDAC2 and PRKDC. Modulates the organization and assembly of the cytoskeleton. Facilitates the CHP1-dependent microtubule and membrane associations through its ability to stimulate the binding of CHP1 to microtubules (By similarity).

Glyceraldehyde-3-phosphate dehydrogenase is a key enzyme in glycolysis that catalyzes the first step of the pathway by converting D-glyceraldehyde 3-phosphate (G3P) into 3-phospho-D-glyceroyl phosphate. Component of the GAIT (gamma interferon-activated inhibitor of translation) complex which mediates interferon-gamma-induced transcript-selective translation inhibition in inflammation processes. Upon interferon-gamma treatment assembles into the GAIT complex which binds to stem loop-containing GAIT elements in the 3'-UTR of diverse inflammatory mRNAs (such as ceruplasmin) and suppresses their translation.

Molecular Weight:

Calculated MW: 37.1 kDa

Observed MW: 34-37 kDa

UniProt:

P04406

#### **Application Details**

Application Notes:	Optimal working dilution should be determined by the investigator.
Comment:	used as Immunogen for (ABIN6999908, ABIN7234256, ABIN7234257 and ABIN7234258)
Restrictions:	For Research Use only

#### Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4.  Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

## Handling

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Expiry Date:

12 months