

## Product datasheet

# Recombinant Human GAPDH protein ab77109

★★★★★ [1 Abreviews](#) [5 References](#) [1 Image](#)

### Description

<b>Product name</b>	Recombinant Human GAPDH protein
<b>Purity</b>	> 95 % SDS-PAGE. ab77109 is purified by using conventional chromatography techniques.
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P04406</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MGKVKVGVNG FGRIGRLVTR AAFNSGKVDI VAINDPFIDL NYMVYMFQYD STHGKFHGTV KAENGKLVIN GNPITIFQER DPSKIKWGDA GAEYVVESTG VFTTMEKAGA HLQGGAKRVI ISAPSADAPM FVMGVNHEKY DNSLKIISNA SCTTNCLAPL AKVIHDNFGI VEGLMTTVHA ITATQKTVDG PSGKLWRDGR GALQNIIPAS TGAAKAVGKV IPELNGKLTG MAFRVPTANV SVVDLTCRLE KPAKYDDIKK VVKQASEGPL KGILGYTEHQ VVSSDFNSDT HSSTFDAGAG IALNDHFVKL ISWYDNEFGY SNRVVDLMAH MASKE
<b>Predicted molecular weight</b>	36 kDa
<b>Amino acids</b>	1 to 335

### Specifications

Our **Abpromise guarantee** covers the use of **ab77109** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

**Form** Liquid

### Preparation and Storage

**Stability and Storage** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.0154% DTT, 0.242% Tris, 0.0292% EDTA, 20% Glycerol (glycerin, glycerine)

## General Info

### Function

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 (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.

### Pathway

Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1/5.

### Sequence similarities

Belongs to the glyceraldehyde-3-phosphate dehydrogenase family.

### Post-translational modifications

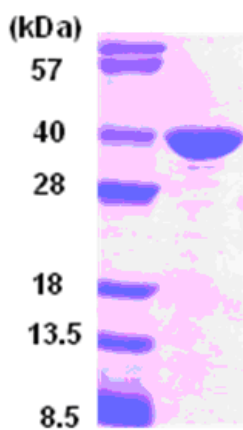
S-nitrosylation of Cys-152 leads to interaction with SIAH1, followed by translocation to the nucleus.

ISGylated.

### Cellular localization

Cytoplasm > cytosol. Nucleus. Cytoplasm > perinuclear region. Membrane. Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity). Postnuclear and Perinuclear regions.

## Images



SDS-PAGE showing 3ug of ab77109 migrating at approximately 36kDa.

SDS-PAGE - Recombinant Human GAPDH protein  
(ab77109)

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