

Product datasheet

Recombinant Human GAPDH protein (His tag)
 ab223103

1 Image

Description

Product name	Recombinant Human GAPDH protein (His tag)	
Purity	> 95 % SDS-PAGE.	
Endotoxin level	< 1.000 Eu/μg	
Expression system	Escherichia coli	
Accession	P04406	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	GKVKVGVNGFGRIGRLVTRAAFNSGKVDIVAINDPFIDL NYMVYMFQYDS THGKFHGTVKAENGLVINGNPITIFQERDPSKIKWGDA GAEYVVESTGV FTTMEKAG AHLQGGAKRVIISAPSADAPMFVMGVNHE KYDNSLKIISNAS CTTNCLAPLAKVIHDNFGIVEGLMTTVHAITATQKTVDG PSGKLWRDGRG ALQNIIPASTGAAKAVGKVIPELNGKLTGMAFRVPTANV SVVDLTCRLEK PAKYDDIKKVVVKQASEGPLKGILGYTEHQVVSSDFNSD THSSTFDAGAGI ALNDHFVKLISWYDNEFGYSNRVVDLMAHMASKE	
Predicted molecular weight	37 kDa including tags	
Amino acids	2 to 335	
Tags	His tag N-Terminus	
Additional sequence information	AAH01601.	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab223103** 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 Lyophilised

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.50

Constituents: 0.87% Sodium chloride, 5% Trehalose, 0.61% Tris

Lyophilized from 0.22 µm filtered solution.

Reconstitution It is recommended to reconstitute the lyophilized product in sterile deionized water to a final concentration of 1 mg/ml. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% HSA or BSA) is strongly recommended for further dilution and long term storage.

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.

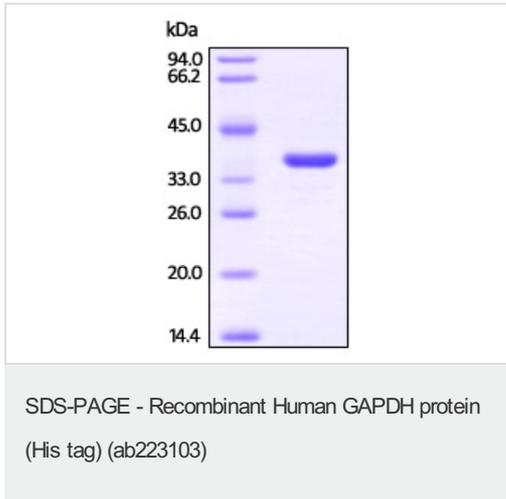
Pathway Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1/5.

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



ab223103 analyzed by DTT-reduced SDS-PAGE and stained overnight with Coomassie Blue.

DTT-reduced protein migrates as 37 kDa in SDS-PAGE.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors