

Product datasheet

GAPDH positive control ChIP primer pair ab267832

[2 Images](#)

Overview

Product name	GAPDH positive control ChIP primer pair
Description	GAPDH positive control ChIP primer pair
Tested applications	Suitable for: ChIP
General notes	<p>Positive control ChIP-qPCR 5' and 3' primers for GAPDH gene. Use with SYBR green.</p> <p>We recommend these primers as a positive control (based on Abcam's testing) for the histone marks below. They may also be useful for other histone marks.</p> <ul style="list-style-type: none">- Histone H3 acetyl K27- Histone H3 tri methyl K4- Histone H3 acetyl K9- Histone H3 acetyl K18- Histone H3 acetyl K4- Histone H2A.Z- Histone H3.3- Histone H4 (unmodified) <p>500pmole of each oligo per unit (lyophilised). HPLC purified, desalted and lyophilised as a sodium salt.</p> <p>Quantity provided is sufficient for approx. 200 reactions based on 2.5pmol of primer per reaction with a final concentration of 100nM in 25µl.</p> <p>Please contact us after purchase if you require the sequence of the oligos.</p>

Properties

Form	Lyophilized
Storage instructions	Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Clonality	Monoclonal

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab267832 in the following tested applications.

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

Application	Abreviews	Notes
ChIP		Use at an assay dependent concentration.

Target

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.

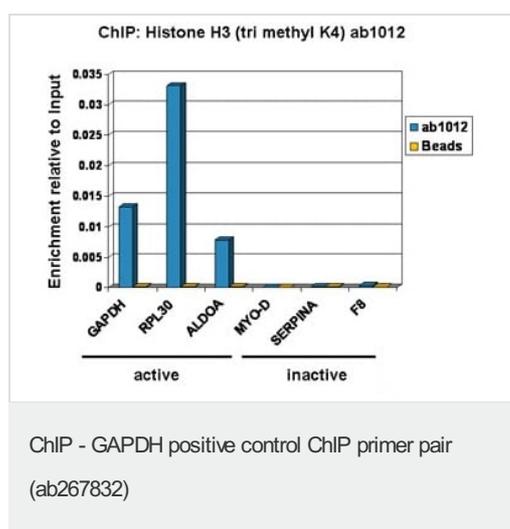
Post-translational modifications

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

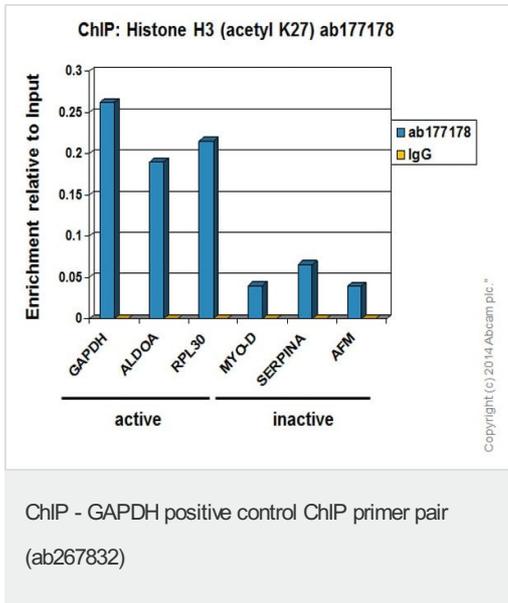
Cellular localization

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



Chromatin was prepared from U2OS cells according to the [Abcam X-ChIP protocol](#). Cells were fixed with formaldehyde for 10min. The ChIP was performed with 25 µg of chromatin, 5 µg of [ab1012](#) (blue), and 20 µl of Protein A/G sepharose beads. No antibody was added to the beads control (yellow). The immunoprecipitated DNA was quantified by real time PCR (Taqman approach). Primers and probes are located in the first kb of the transcribed region.



Chromatin was prepared from HeLa (Human epithelial cell line from cervix adenocarcinoma) cells according to the [Abcam X-ChIP protocol](#). Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 25µg of chromatin, 2µg of [ab177178](#) (blue), and 20µl of Anti rabbit IgG sepharose beads. 2µg of rabbit normal IgG was added to the beads as a control sample (yellow). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).

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

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