

Direct-Blot™ HRP anti-GAPDH Antibody

Catalog# / Size	607903 / 25 µL 607904 / 100 µL
Clone	W17079A
Regulatory Status	RUO
Other Names	glyceraldehyde-3-phosphate dehydrogenase
Isotype	Rat IgG2a, κ
Description	GAPDH is well known for its glycolytic function of converting D-glyceraldehyde-3-phosphate to 1,3-bisphosphoglycerate. GAPDH is a ubiquitously expressed and has a molecular mass of 36 kD. Though differentially expressed from tissue to tissue, GAPDH is frequently used as a loading control for assays involving mRNA and protein detection. In more recent studies, GAPDH has been shown to be involved in microtubule bundling, prostate cancer progression, programmed neuronal cell death, DNA replication, and DNA repair. Recent work has elucidated roles for GAPDH in apoptosis, gene expression and nuclear transport. GAPDH may also play a role in neurodegenerative pathologies such as Huntington and Alzheimer's diseases.

Product Details

Verified Reactivity	Human, Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Recombinant protein (161-335 a.a.)
Formulation	This antibody is provided in 50% glycerol in aqueous buffered solutions with preservatives.
Preparation	The antibody was purified by affinity chromatography and conjugated with HRP under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	Upon receipt, the antibody solution should be stored undiluted at -20°C, and protected from prolonged exposure to light.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 0.2 µg per ml (1:4000 - 1:16000 dilution). It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	This clone weakly reacts with rat GAPDH.
RRID	AB_2734504 (BioLegend Cat. No. 607903) AB_2734505 (BioLegend Cat. No. 607904)

Antigen Details

Structure	Belongs to the glyceraldehyde-3-phosphate dehydrogenase family, predicted molecular weight 36 kD. The enzyme exists as a tetramer of identical chains.
Distribution	Ubiquitously expressed, locate in cytoplasm and perinuclear region.
Function	Belongs to the glyceraldehyde-3-phosphate dehydrogenase family, predicted molecular weight 36 kD. The enzyme exists as a tetramer of identical chains.
Interaction	Interacts with TPPP. Interacts with EIF1AD and WARS. Interacts with SUMO4, GLUT4, nPKC-iota

and CAMK2.

Biology Area

Cell Biology, Western Blot Controls

Antigen References

1. Ercolani L, *et al.* 1988. *J. Biol. Chem.* 263:15335.
2. Meyer-Siegler K, *et al.* 1991. *Proc. Natl. Acad. Sci. USA.* 88:8460.
3. Hara MR, Snyder SH. 2006. *Cell. Mol. Neurobiol.* 26:527.
4. Zheng L, *et al.* 2003. *Cell.* 114:255.
5. Wang Q, *et al.* 2005. *FASEB J.* 19:869.
6. Bae BI, *et al.* 2006. *Proc. Natl. Acad. Sci. USA.* 103:3405.

Gene ID

[5590](#)

Related Protocols

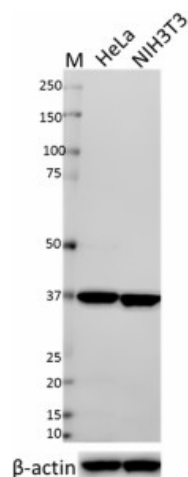
[Direct-Blot™ HRP Antibodies Save You Time - Video](#)

[Western Blotting Protocol](#)

Other Formats

Purified anti-GAPDH, Direct-Blot™ HRP anti-GAPDH, Alexa Fluor® 488 anti-GAPDH

Product Data



Whole cell lysates (15 µg protein) from HeLa and NIH3T3 cells were resolved by electrophoresis (4-12% Bis-Tris gel), transferred to nitrocellulose, and probed with 1:4000 Direct-Blot™ HRP anti-GAPDH antibody, clone W17079A (upper). 1:2000 dilution of Direct-Blot™ HRP anti-β-actin antibody (Cat. No. 643807) was used as a loading control (lower). Proteins were visualized using chemiluminescence detection. Lane M: MW ladder.

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