



Anti-GAPDH monoclonal antibody, clone 4G5 (CABT-54408MH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

Mouse anti Human GAPDH antibody, clone 4G5 recognizes glyceraldehyde-3-phosphate dehydrogenase (GAPDH), a 36kD multifunctional protein whose main function is to catalyse the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate, in conjunction with inorganic phosphate and nicotinamide adenine dinucleotide (NAD). This reaction is an important energy yielding step in carbohydrate metabolism. GAPDH has also been shown to translocate to the nucleus under a variety of stressors, most of which are associated with oxidative stress, whereby it mediates cell death. A further report has shown that GAPDH binds to several proteins that are responsible for neurodegenerative diseases, such as amyloid precursor protein and Huntingtin.

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| Specificity | GAPDH |
| Immunogen | Human cardiac muscle GAPDH |
| Isotype | IgG1 |
| Source/Host | Mouse |
| Species Reactivity | Human, Bovine, Cat, Dog, Fish, Goat, Mouse, Pig, Rabbit, Rat |
| Clone | 4G5 |
| Conjugate | Unconjugated |
| Applications | IHC-Fr; ELISA; IF; IP; WB |
| Format | Purified IgG - liquid |
| Size | 200 µg |
| Preservative | 0.09% Sodium Azide |

Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

GENE INFORMATION

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| Gene Name | GAPDH glyceraldehyde-3-phosphate dehydrogenase [Oryctolagus cuniculus (rabbit)] |
| Official Symbol | GAPDH |
| Synonyms | GAPDH; glyceraldehyde-3-phosphate dehydrogenase; peptidyl-cysteine S-nitrosylase GAPDH; |
| Entrez Gene ID | 100009074 |
| Protein Refseq | NP_001075722 |
| UniProt ID | P00355 |
| Chromosome Location | chromosome: 8 |
| Pathway | Alzheimers disease; Biosynthesis of amino acids; Carbon metabolism; Gluconeogenesis, oxaloacetate => fructose-6P; Glycolysis (Embden-Meyerhof pathway), glucose => pyruvate; Glycolysis / Gluconeogenesis; Glycolysis, core module involving three-carbon compounds; HIF-1 signaling pathway; |