Human GAPDH antibody

Catalog Number: ATGA0181

PRODUCT INFORMATION

Catalog number
ATGA0181

Clone No.
AT8G4

Product type
Monoclonal Antibody

UnitProt No.
P04406

NCBI Accession No.
NP_002037

Alternative Names
Glyceraldehyde-3-phosphate dehydrogenase isoform 1, Peptidyl-cysteine S-nitrosylase GAPDH, GAPD, G3PD

PRODUCT SPECIFICATION

Antibody Host
Mouse

Reacts With
Human

Concentration
1mg/ml (determined by BCA assay)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen
Recombinant human GAPDH (1-335aa) purified from E.coli

Isotype
IgG2b kappa

Purification Note
By protein-G affinity chromatography

Application
ELISA, WB, ICC/IF

Usage
The antibody has been tested by ELISA, Western blot and ICC/IF analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Storage

Human GAPDH antibody

Catalog Number: ATGA0181

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

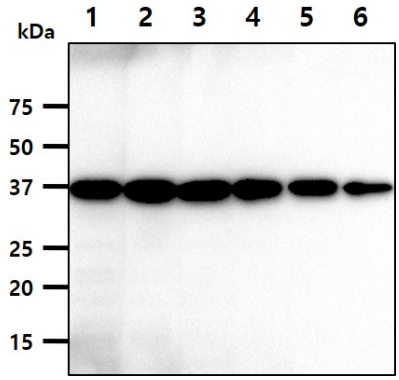
Multiple roles for glyceraldehyde-3-phosphate dehydrogenase (GAPDH) have been recently appreciated. GAPDH is found in the particulate fractions, such as the nucleus, the mitochondria, and the small vesicular fractions. GAPDH gene expression is specifically increased during programmed neuronal cell death. When cells are exposed to various stressors, dynamic subcellular re-distribution of GAPDH occurs. GAPDH is also involved in various diseases, especially neurodegenerative disorders and cancers. As a membrane protein, GAPDH functions in endocytosis; in the cytoplasm, it is involved in the translational control of gene expression; in the nucleus, it functions in nuclear tRNA export, in DNA replication, and in DNA repair.

General References

Chuang DM, et al. (2005) Annu Rev Pharmacol Toxicol, 45:269-90.
Mazzola JL, et al. (2002) Neurotoxicology, 23(4-5):603-9.
Sirover MA. (1997) J Cell Biochem, 66(2):133-40.

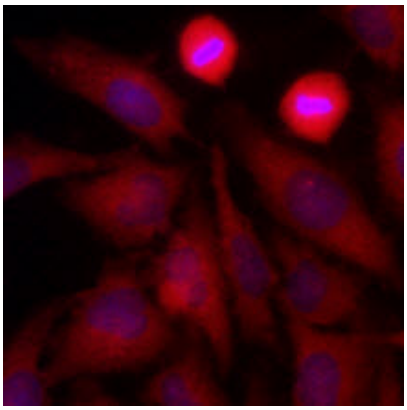
DATA

Western blot analysis (WB)



The HeLa cell lysates (35ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human GAPDH antibody. Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: Anti-human GAPDH antibody(1:1000)
Lane 2.: Anti-human GAPDH antibody(1:2000)
Lane 3.: Anti-human GAPDH antibody(1:4000)
Lane 4.: Anti-human GAPDH antibody(1:6000)
Lane 5.: Anti-human GAPDH antibody(1:8000)
Lane 6.: Anti-human GAPDH antibody(1:10000)

Immunocytochemistry/Immunofluorescence (ICC/IF)



Immunofluorescence of human HeLa cells stained with Hoechst 3342(Blue) for nucleus staining and monoclonal anti-human GAPDH antibody (1:500) with Texas Red