

Store at
-20°C

GPI Antibody

#57893

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orders@cellsignal.comEntrez-Gene ID #2821
UniProt ID #P06744

New 01/19

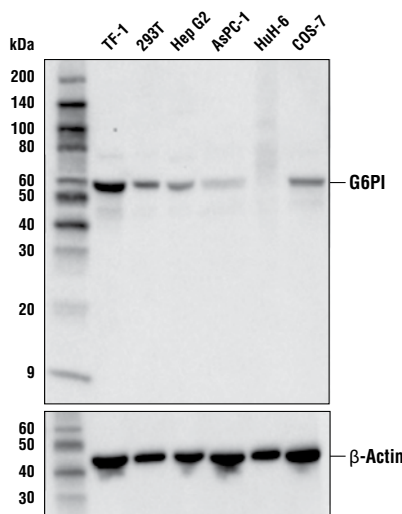
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Applications W Endogenous	Species Cross-Reactivity* H, Mk	Molecular Wt. 60 kDa	Source Rabbit**
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Background: Glucose-6-phosphate isomerase (GPI) is a multi-functional protein belonging to the glucose phosphate isomerase family (1,2). As an intracellular metabolic enzyme, GPI plays a pivotal role in glycolysis and gluconeogenesis by catalyzing the interconversion of D-glucose-6-phosphate and D-fructose-6-phosphate (3). GPI is also secreted, where it functions as a cytokine (referred to as Autocrine Motility Factor, AMF), acting via the E3-ubiquitin-protein ligase AMFR/gp78 (4). In normal tissues, GPI/AMF has been shown to promote both immune cell maturation and neuronal cell survival (5,6). It is also secreted in abundance by some tumor cells (7), where it has been shown to promote tumor cell migration and metastasis (8,9).

Specificity/Sensitivity: GPI Antibody recognizes endogenous levels of total G6PI protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro8 of human G6PI protein. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts from various cell lines using GPI Antibody (upper) and β -Actin (D6A8) Rabbit mAb #8457 (lower). Expression levels of G6PI among cell lines are consistent with expectations based on publicly available bioinformatic databases.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at -20°C . Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com.

Background References:

- (1) Haga, A. et al. (2000) *Biochim Biophys Acta* 1480, 235-44.
- (2) Jeffery, C.J. et al. (2000) *Biochemistry* 39, 955-64.
- (3) Kim, J.W. and Dang, C.V. (2005) *Trends Biochem Sci* 30, 142-50.
- (4) Fairbank, M. et al. (2009) *Mol Biosyst* 5, 793-801.
- (5) Gurney, M.E. et al. (1986) *Science* 234, 574-81.
- (6) Gurney, M.E. et al. (1986) *Science* 234, 566-74.
- (7) Lucarelli, G. et al. (2015) *Medicine (Baltimore)* 94, e2117.
- (8) Liotta, L.A. et al. (1986) *Proc Natl Acad Sci U S A* 83, 3302-6.
- (9) Funasaka, T. and Raz, A. (2007) *Cancer Metastasis Rev* 26, 725-35.

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IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween[®]20 at 4°C with gentle shaking, overnight.

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.