

#4591 Store at -20°C

GATA-1 Antibody

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID #2623
Swiss-Prot Acc. #P15976

| Applications W, IP Endogenous | Species Cross-Reactivity* H | Molecular Wt. 43 kDa | Source Rabbit** |
|-------------------------------------|--------------------------------|-------------------------|--------------------|
|-------------------------------------|--------------------------------|-------------------------|--------------------|

Background: GATA proteins comprise a group of transcription factors that are related by the presence of conserved zinc finger DNA binding domains that bind directly to the nucleotide sequence core element GATA (1-3). There are six vertebrate GATA proteins, designated GATA-1 to GATA-6 (3).

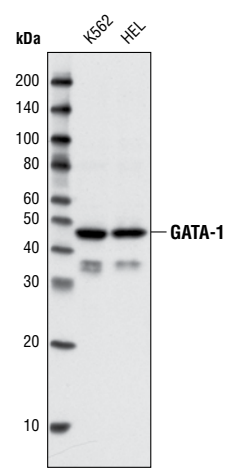
GATA-1 is the founding member of the GATA family and is required for erythroid and megakaryocytic cell development (4,5). Mutations in GATA-1 have been linked to many human diseases, including acute megakaryoblastic leukemia in Down syndrome children (DS-AMKL), X-linked thrombocytopenia, and gray platelet syndrome (6-9).

Specificity/Sensitivity: GATA-1 Antibody detects endogenous levels of total GATA-1 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro401 of human GATA-1. Antibodies are purified by peptide affinity chromatography

Background References:

- (1) Ko, L.J. and Engel, J.D. (1993) *Mol Cell Biol* 13, 4011-22.
- (2) Merika, M. and Orkin, S.H. (1993) *Mol Cell Biol* 13, 3999-4010.
- (3) Lowry, J.A. and Atchley, W.R. (2000) *J Mol Evol* 50, 103-15.
- (4) Pevny, L. et al. (1991) *Nature* 349, 257-60.
- (5) Fujiwara, Y. et al. (1996) *Proc Natl Acad Sci USA* 93, 12355-8.
- (6) Wechsler, J. et al. (2002) *Nat Genet* 32, 148-52.
- (7) Cantor, A.B. (2005) *Int J Hematol* 81, 378-84.
- (8) Mehaffey, M.G. et al. (2001) *Blood* 98, 2681-8.
- (9) Tubman, V.N. et al. (2007) *Blood* 109, 3297-9.



Western blot analysis of total lysates from K562 and HEL cells using GATA-1 Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/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 |
| Immunoprecipitation | 1:50 |

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

Species Cross-Reactivity Key: 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.