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Store at -20C
#4589

GATA-1 (D24E4) XP[®] Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IF-IC, FC-FP	H	Endogenous	43	Rabbit IgG	#P15976	2623

Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:50
1:200
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

GATA-1 (D24E4) XP[®] Rabbit mAb detects endogenous levels of GATA-1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala184 of human GATA-1.

Background

GATA proteins comprise a group of transcription factors that are related by the presence of conserved zinc finger DNA-binding domains, which 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 the corresponding *GATA-1* gene are linked to many human diseases, including acute megakaryoblastic leukemia in Down Syndrome children (DS-AMKL), X-linked thrombocytopenia, and gray platelet syndrome (6-9).

Background References

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

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human

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