

#4327 Store at -20°C

Phospho-AML1 (Ser249) Antibody



100 µl
 (10 western blots)

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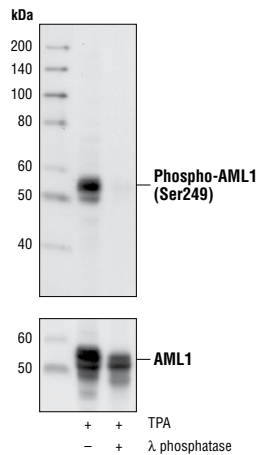
This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IP, F, IF-IC Endogenous	H	55 kDa	Rabbit**

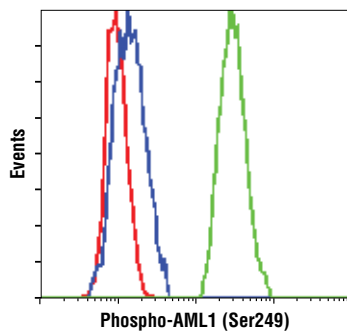
Background: AML1 (also known as Runx1, CBFA2 and PEBP2αB) is a member of the CBF (core binding factor) family of transcription factors (1,2). It is required for normal development of all hematopoietic lineages (3,4,5). AML1 forms a heterodimeric DNA binding complex with its partner protein CBFβ and regulates the expression of cellular genes by binding to promoter and enhancer elements. AML1 is commonly translocated in hematopoietic cancers: chromosomal translocations include t(8;21) AML1-ETO, t(12;21)TEL-AML and t(8;21) AML-M2 (6). Phosphorylation of AML1 on several potential serine and threonine sites, including Ser249, is thought to occur in an ERK-dependent manner (7,8).

Specificity/Sensitivity: Phospho-AML1 (Ser249) Antibody detects endogenous levels of AML1 protein only when phosphorylated on Ser249.

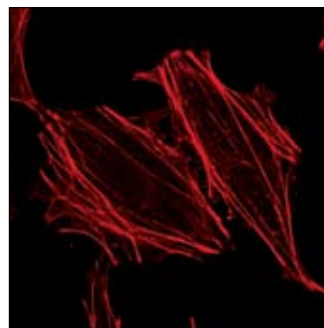
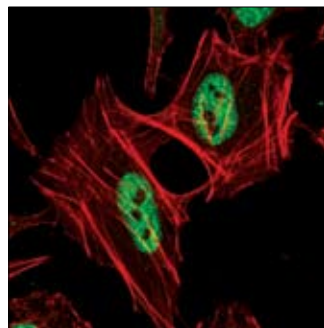
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acids around Ser249 of human AML1. Antibodies are purified by protein A and peptide affinity chromatography.



Western blot analysis of extracts of TPA treated HEL cells, untreated or treated with λ phosphatase, using Phospho-AML1 (Ser249) Antibody (upper), or AML1 Antibody #4334 (lower).



Flow cytometric analysis of Jurkat cells, untreated (green) or treated with λ phosphatase (blue), using Phospho-AML1 (Ser249) Antibody compared to a nonspecific negative control antibody (red).



Entrez-Gene ID #861
Swiss-Prot Acc. #Q01196

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	1:100
Immunofluorescence (IF-IC)	1:800
Flow Cytometry	1:50

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

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

Background References:

- (1) Wang, S. et al. (1993) *Mol. Cell. Biol.* 13, 3324–3339.
- (2) Ogawa, E. et al. (1993) *Proc. Natl. Acad. Sci. USA* 90, 6859–6863.
- (3) Okuda, T. et al. (1996) *Cell* 84, 321–330.
- (4) Wang, Q. et al. (1996) *Proc. Natl. Acad. Sci. USA* 93, 3444–3449.
- (5) North, T.E. et al. (2004) *Stem Cells* 22, 158–168.
- (6) Blyth, K. et al. (2005) *Nat. Rev. Cancer* 5, 376–387.
- (7) Tanaka, T. et al. (1996) *Mol. Cell. Biol.* 16, 3967–3979.
- (8) Zhang, Y. et al. (2004) *J. Biol. Chem.* 279, 53116–53125.

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.

◀Confocal immunofluorescent analysis of HeLa cells, untreated or treated with λ phosphatase, using Phospho-AML1 (Ser249) Antibody (green). Actin filaments have been labeled with DY-554 phalloidin (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

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.