

**Phospho-AML1 (Ser249) Antibody**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	55	Rabbit	#Q01196	861

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
1:50

**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.

**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.

**Background**

AML1 (also known as Runx1, CBFA2, and PEBP2aB) is a member of the core binding factor (CBF) family of transcription factors (1,2). It is required for normal development of all hematopoietic lineages (3-5). 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).

**Background References**

1. Wang, S. et al. (1993) *Mol Cell Biol* 13, 3324-39.
2. Ogawa, E. et al. (1993) *Proc Natl Acad Sci U S A* 90, 6859-63.
3. Okuda, T. et al. (1996) *Cell* 84, 321-30.
4. Wang, Q. et al. (1996) *Proc Natl Acad Sci U S A* 93, 3444-9.
5. North, T.E. et al. (2004) *Stem Cells* 22, 158-68.
6. Blyth, K. et al. (2005) *Nat Rev Cancer* 5, 376-87.
7. Tanaka, T. et al. (1996) *Mol Cell Biol* 16, 3967-79.
8. Zhang, Y. et al. (2004) *J Biol Chem* 279, 53116-25.

**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

**Cross-Reactivity Key**

**H:** Human

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