

#4336 Store at -20°C

AML1 (D33G6) XP® Rabbit mAb



✓ 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.	Isotype
W, IHC-P, IF-IC, F Endogenous	H, Mk	55 kDa	Rabbit IgG**

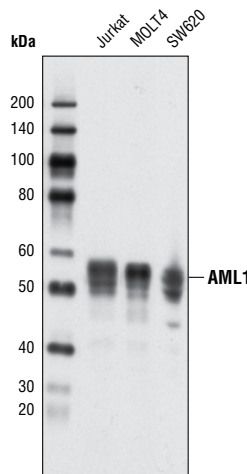
Background: AML1 (also known as Runx1, CBFA2 and PEBP2αB) is a member of the CBF (core binding factor) family of transcription factors (1,2). It is required for normal development of all hematopoietic lineages (3,4,5). AML1 forms a heterodimeric DNA binding complex with its partner protein CBFβ and regulates 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: AML1 (D33G6) XP® Rabbit mAb detects endogenous levels of total AML1 protein.

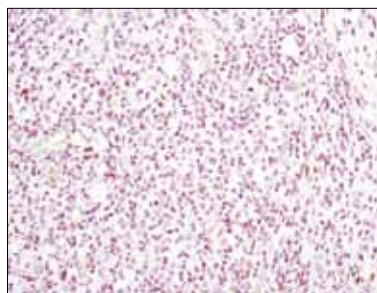
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to amino acids at the amino terminus of human AML1.

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, 321–30.
- (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, 3967–79.
- (8) Zhang, Y. et al. (2004) *J Biol Chem* 279, 53116–25.



Western blot analysis of extracts from various cell lines using AML1 (D33G6) XP® Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded human non-Hodgkin's lymphoma using AML1 (D33G6) XP® Rabbit mAb in the presence of control peptide (upper) or antigen specific peptide (lower).

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.

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, 50% glycerol and less than 0.02% sodium azide. 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
Immunohistochemistry (Paraffin)	1:500†
Unmasking buffer:	Citrate

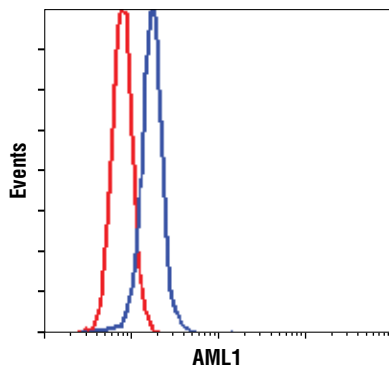
Antibody diluent:	SignalStain® Antibody Diluent #8112
Detection reagent:	SignalStain® Boost (HRP, Rabbit) #8114

†Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.

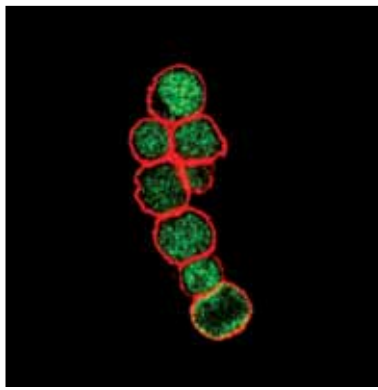
Immunofluorescence (IF-IC)	1:200
IF Protocol:	Methanol Permeabilization required
Flow Cytometry	1:200

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.



Flow cytometric analysis of Jurkat cells using AML1 (D33G6) XP® Rabbit mAb (blue) compared to a nonspecific negative control antibody (red).



Confocal immunofluorescent analysis of Jurkat cells using AML1 (D33G6) XP® Rabbit mAb (green). Actin filaments have been labeled with DY-554 phalloidin (red).