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# E2A Antibody

Store at -20C  
#4865

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

<b>Applications:</b> W	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 75	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #P15923	<b>Entrez-Gene Id:</b> 6929
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## Product Usage Information

### Application

Western Blotting

### Dilution

1:1000

## 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

E2A Antibody detects endogenous levels of total E2A protein.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu475 of human E2A protein. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

E2A is a member of the E-protein family of transcription factors, a subclass of basic helix-loop-helix (bHLH) proteins that bind specifically to E-box consensus sequences (1,2). Alternative splicing generates two E2A isoforms (E47 and E12) that are actively involved in B cell lineage commitment, B cell maturation, IgK V-J rearrangement, peripheral B cell development, and tumor suppression (3). E2A acts in *cis* during G1 to promote immunoglobulin gene diversification (4). Research studies have shown that chromosomal translocations involving the E2A gene result in the expression of multiple fusion proteins and are associated with many cases of pediatric acute lymphoblastic leukemia (5).

## Background References

1. Murre, C. (2005) *Nat Immunol* 6, 1079-86.
2. Bain, G. et al. (2001) *Nat Immunol* 2, 165-71.
3. Schwartz, R. et al. (2006) *Proc Natl Acad Sci U S A* 103, 9976-81.
4. Yabuki, M. et al. (2009) *J Immunol* 182, 408-15.
5. LeBrun, D.P. (2003) *Front Biosci* 8, s206-22.

## 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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting

## Cross-Reactivity Key

**H:** Human

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