

# RUNX1 (PT0706R) PT™ Rabbit mAb

CatalogNo: YM8515 **Recombinant** 

## Key Features

### Host Species

- Rabbit

### Reactivity

- Human, Mouse, Rat

### Applications

- WB, IHC, IF, IP, ELISA

### MW

- 49kD (Calculated)
- 43-55kD (Observed)

### Isotype

- IgG, Kappa

## Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

## Recommended Dilution Ratios

**IHC 1:200-1:1000****WB 1:2000-1:10000****IF 1:200-1:1000****ELISA 1:5000-1:20000****IP 1:50-1:200**

## Basic Information

**Clonality** Monoclonal**Clone Number** PT0706R

## Immunogen Information

**Specificity** Endogenous

## Target Information

**Gene name** RUNX1

**Protein Name** Runt-related transcription factor 1

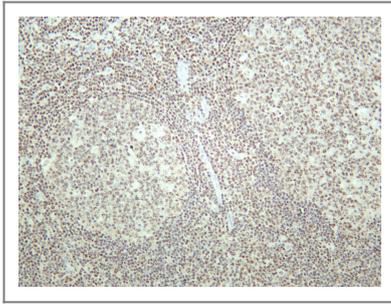
Organism	Gene ID	UniProt ID
Human	<a href="#">861</a> ;	<a href="#">Q01196</a> ;
Mouse	<a href="#">12394</a> ;	<a href="#">Q03347</a> ;
Rat	<a href="#">50662</a> ;	<a href="#">Q63046</a> ;

**Cellular Localization** Nucleus

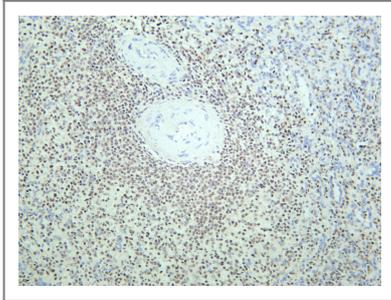
**Tissue specificity** Expressed in all tissues examined except brain and heart. Highest levels in thymus, bone marrow and peripheral blood.

**Function** Alternative products:Additional isoforms seem to exist,Caution:The fusion of AML1 with EAP in T-MDS induces a change of reading frame in the latter resulting in 17 AA unrelated to those of EAP.,Disease:A chromosomal aberration involving RUNX1/AML1 is a cause of chronic myelogenous leukemia (CML). Translocation t(3;21)(q26;q22) with EAP, MSD1 or EVI1.,Disease:A chromosomal aberration involving RUNX1/AML1 is a cause of chronic myelomonocytic leukemia. Inversion inv(21)(q21;q22) with USP16.,Disease:A chromosomal aberration involving RUNX1/AML1 is a cause of M2 type acute myeloid leukemia (AML-M2). Translocation t(8;21)(q22;q22) with RUNX1T1/MTG8/ETO.,Disease:A chromosomal aberration involving RUNX1/AML1 is a cause of therapy-related myelodysplastic syndrome (T-MDS). Translocation t(3;21)(q26;q22) with EAP, MSD1 or EVI1.,Disease:A chromosomal aberration involving RUNX1/AML1 is found in childhood acute lymphoblastic leukemia (ALL). Translocation t(12;21)(p13;q22) with TEL. The translocation fuses the 3'-end of TEL to the alternate 5'-exon of AML-1H.,Disease:A chromosomal aberration involving RUNX1/AML1 is found in therapy-related myeloid malignancies. Translocation t(16;21)(q24;q22) that forms a RUNX1-CBFA2T3 fusion protein.,Disease:Defects in RUNX1 are the cause of familial platelet disorder with associated myeloid malignancy (FPDMM) [MIM:601399]. FPDMM is an autosomal dominant disease characterized by qualitative and quantitative platelet defects, and propensity to develop acute myelogenous leukemia.,Domain:A proline/serine/threonine rich region at the C-terminus is necessary for transcriptional activation of target genes.,Function:CBF binds to the core site, 5'-PYGPGGT-3', of a number of enhancers and promoters, including murine leukemia virus, polyomavirus enhancer, T-cell receptor enhancers, LCK, IL-3 and GM-CSF promoters. The alpha subunit binds DNA and appears to have a role in the development of normal hematopoiesis. Isoform AML-1L interferes with the transactivation activity of RUNX1. Acts synergistically with ELF4 to transactivate the IL-3 promoter and with ELF2 to transactivate the mouse BLK promoter. Inhibits MYST4-dependent transcriptional activation.,PTM:Methylated.,PTM:Phosphorylated in its C-terminus upon IL-6 treatment. Phosphorylation enhances interaction with MYST3.,similarity:Contains 1 Runt domain.,subunit:Heterodimer with CBF. RUNX1 binds DNA as a monomer and through the Runt domain. DNA-binding is increased by heterodimerization. Isoform AML-1L can neither bind DNA nor heterodimerize. Interacts with TLE1 and THOC4. Interacts with ELF1, ELF2 and SPI1. Interacts via its Runt domain with the ELF4 N-terminal region. Interaction with ELF2 isoform 2 (NERF-1a) may act to repress RUNX1-mediated transactivation. Interacts with MYST3 and MYST4. Interacts with SUV39H1, leading to abrogate the transactivating and DNA-binding properties of RUNX1.,tissue specificity:Expressed in all tissues examined except brain and heart. Highest levels in thymus, bone marrow and peripheral blood.,

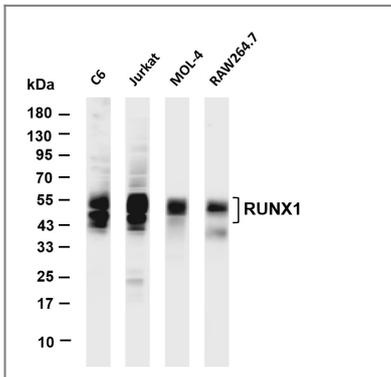
## Validation Data



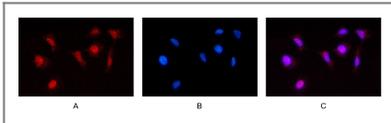
Human tonsil was stained with anti-RUNX1 rabbit antibody



Human spleen was stained with anti-RUNX1 rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-RUNX1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: C6 Lane 2: Jurkat Lane 3: MOL-4 Lane 4: RAW264.7 Predicted band size: 49kDa Observed band size: 43-55kDa



Immunofluorescence analysis of HEK293. Picture A: RUNX1 antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

## Contact information

Orders: [order@immunoway.com](mailto:order@immunoway.com)  
Support: [tech@immunoway.com](mailto:tech@immunoway.com)  
Telephone: 877-594-3616 (Toll Free), 408-747-0185  
Website: <http://www.immunoway.com>  
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:  
**RUNX1 (PT0706R)**  
**PT™ Rabbit mAb**