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Product data sheet

# **RUNX1** Polyclonal Antibody

## Catalog Number PA5-19638

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Details		Species Reactivity	
Size	100 µg	Species reactivity	Human, Mouse
Host/Isotope	Rabbit / IgG	Published species	Mouse
Class	Polyclonal	Tested Applications	Dilution *
Туре	Antibody	Western Blot (WB)	0.25-0.5 μg/ml
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 400 to the C-terminus of Human RUNX1 / AML1.	Immunocytochemistry (ICC/IF)	5 µg/ml
		Published Applications	
		Immunoprecipitation (IP)	See 1 publications below
Conjugate	Unconjugated	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	
Form	Liquid		
Concentration	0.9 mg/mL		
Purification	Antigen affinity chromatography		
Storage buffer	PBS, pH 7.4, with BSA		
Contains	0.02% sodium azide		
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.		

#### Product specific information

For Western Blot, this antibody has non-specific bands at 47 kDa and 75 kDa. This antibody is predicted to react with rat and chicken based on sequence homology.

#### Background/Target Information

RUNX1 belongs to the mammalian RUNX family of DNA binding proteins that regulate the expression of genes involved in cellular differentiation and cell cycle progression. RUNX1 is essential for hematopoietic stem cell generation in the vascular regions of the aorta, vitelline and umbilical arteries, yolk sac and placenta. RUNX1 is expressed in all tissues except brain and heart, with highest levels in thymus, bone marrow and peripheral blood.

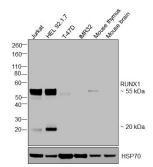
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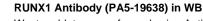
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### Product Images For RUNX1 Polyclonal Antibody

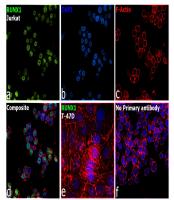


#### RUNX1 Antibody (PA5-19638)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Western blot analysis using Anti-RUNX1 Polyclonal Antibody (Product # PA5-19638) shows increased expression of RUNX1 in Jurkat, HEL 92.1.7 cell lines when compared to T-47D and IMR32 (doi: 10.1371/journal.pone.0100759). {RE}

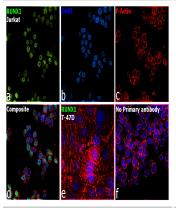


Western blot was performed using Anti-RUNX1 Polyclonal Antibody, (Product # PA5-19638) and 55 kDa, 20 kDa bands corresponding to RUNX1 isoforms were observed in the cell lines and tissue tested, with higher expression in Jurkat, HEL 92.1.7 compared to T-47D and IMR32. Modified whole cell extracts (1% SDS) (40 µg lysate) of Jurkat (Lane 1), HEL 92.1.7 (Lane 2), T-47D (Lane 3), IMR32 (Lane 4), Mouse thymus (lane 5) and Mouse brain (Lane 6) were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (0.5 µg/mL) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain), Superclonal<sup>™</sup> Recombinant Secondary Antibody, HRP conjugate (Product # A27036, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



#### RUNX1 Antibody (PA5-19638)

Antibody specificity was demonstrated by detection of differential basal expression of the target across cell models owing to their inherent genetic constitution. Immunofluorescence analysis using Anti-RUNX1 Polyclonal Antibody (Product # PA5-19638) shows increased expression of RUNX1 in Jurkat cell line when compared to T-47D (doi: 10.1371/journal.pone.0100759). {RE}



#### RUNX1 Antibody (PA5-19638) in ICC/IF

Immunofluorescence analysis of RUNX1 was performed using 70% confluent log phase Jurkat cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton<sup>™</sup> X-100 for 15 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with RUNX1 Polyclonal Antibody (Product # PA5-19638) at 5 µg/mL in 0.1% BSA, incubated at 4 degree Celsius overnight and then with Donkey anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32790) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e represents T-47D cells having no expression of RUNX1. Panel f represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

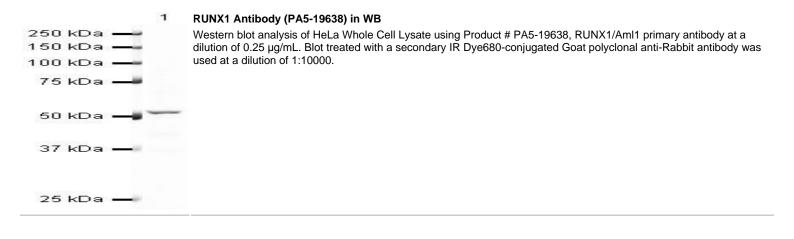
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PubMed References I	For RUNX1 Polyclonal Antibody
1 Immunoprecipitation	References
Species / Dilution	Summary
	PA5-19638 was used in Immunoprecipitation to provide insights into the molecular mechanisms driving virus-specific CD8 T cell responses and suggest a general mechanism for the formation of transcriptional and epigenetic memory applicable to other immune and non-immune cells.
Mouse / Not Cited	Immunity (2019; 50: 1202) <b>"Natural Genetic Variation Reveals Key Features of Epigenetic and Transcriptional Memory in Virus-Specific CD8 T Cells."</b> Author(s):van der Veeken J,Zhong Y,Sharma R,Mazutis L,Dao P,Pe'er D,Leslie CS,Rudensky AY PubMed Article URL:http://dx.doi.org/10.1016/j.immuni.2019.03.031

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