

## **CD7 Antibody**



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

<b>Applications:</b> W	Reactivity: H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 38-40	<b>Source/Isotype:</b> Rabbit	UniProt ID: #P09564	Entrez-Gene Id: 924
Product Usage Information		<b>Application</b> Western Blotting			<b>Dilution</b> 1:1000	
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 $\mu$ g/ml BSA and 50% glycerol. Store at – 20°C. Do not aliquot the antibody.				
Specificity/Sensitivity		CD7 Antibody recognizes endogenous levels of total CD7 protein. This antibody cross-reacts with an unidentified protein of 90 kDa in some cell extracts.				
Source / Purification		Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ile69 of human CD7 protein. Antibodies are purified by protein A and peptide affinity chromatography.				
Background		CD7 is a type-I transmembrane glycoprotein belonging to the immunoglobulin superfamily. CD7 is one of the earliest surface markers to be expressed on the surface of developing T cells and its expression is maintained throughout maturation of multiple T cell subsets and NK cells (1-3). Engagement of CD7 through binding its ligand, SECTM1, has been shown to promote tyrosine phosphorylation of its cytoplasmic domain, recruitment of PI3K, and delivery of costimulatory signals for T cell activation (4-6). While CD7 is expressed on normal T cells, it is also highly expressed in a variety of T cell malignancies, which has poised it as a potential target of immunotherapy (7-9).				
Background References		1. Haynes, B.F. et al. (1988) <i>J Exp Med</i> 168, 1061-80. 2. Lobach, D.F. et al. (1985) <i>J Immunol</i> 135, 1752-9. 3. Rabinowich, H. et al. (1994) <i>J Immunol</i> 152, 517-26. 4. Ward, S.G. et al. (1995) <i>Eur J Immunol</i> 25, 502-7. 5. Chan, A.S. et al. (1997) <i>J Immunol</i> 159, 934-42. 6. Lyman, S.D. et al. (2000) <i>J Biol Chem</i> 275, 3431-7. 7. Cooper, M.L. et al. (2018) <i>Leukemia</i> , . 8. Png, Y.T. et al. (2017) <i>Blood Adv</i> 1, 2348-2360. 9. Gomes-Silva, D. et al. (2017) <i>Blood</i> 130, 285-296.				

**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

Cross-Reactivity Key H: Human

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