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Applications: W, IP, FC-FP	Reactivity: M	Sensitivity: Endogenous	MW (kDa): 17, 14	Source/Isotype: Rabbit IgG	UniProt ID: #Q62386	Entrez-Gene Id: 16171
Product Usage Information	9	Application Western Blotting Immunoprecipitation Flow Cytometry (Fixed	d/Permeabilized)		Dilution 1:1000 1:200 1:400 - 1	:1600
Storage		Supplied in 10 mM so 0.02% sodium azide.	dium HEPES (pH 7.! Store at –20°C. Do r	5), 150 mM NaCl, 100 μg lot aliquot the antibody.	/ml BSA, 50% glycei	ol and less than
		For a carrier free (BSA	and azide free) ver	sion of this product see	product #90428.	
Specificity/Ser	nsitivity	IL-17A (D1X7L) Rabbit mAb recognizes endogenous levels of total mouse IL-17A protein.				
Species predic based on 100% homology	ted to react 6 sequence	Rat				
Source / Purifi	cation	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val49 of mouse IL-17A protein.				
Background		The IL-17 family of cytokines consists of IL-17A-F, and their receptors include IL-17RA-RE (1). IL-17 cytokines are produced by a variety of cell types including the Th17 subset of CD4+ T cells, as well as subsets of γδ T cells, NK cells, and NKT cells (2). IL-17A and IL-17F, the most well-studied of the IL-17 cytokines, contribute to fungal and bacterial immunity by inducing expression of proinflammatory cytokines, chemokines, and antimicrobial peptides (2). In addition, IL-17A contributes to the pathogenesis of several autoimmune diseases (3). IL-17E promotes Th2 cell responses (4). The roles of IL-17B, IL-17C, and IL-17D are less clear, however these family members also appear to have the capacity to induce proinflammatory cytokines (1,5,6). IL-17 receptors have an extracellular domain, a transmembrane domain, and a SEFIR domain. They are believed to signal as homodimers, heterodimers, or multimers through their SEFIR domain by recruiting the SEFIR domain-containing adaptor Act1 (7). Unlike most cytokines that signal through Jak/STAT pathways, IL-17 signaling results NF-κB activation (8).				
		IL-17A is a cysteine-lir CD4+ T cell lineage (9 TNFα, and IL-6. IL-17A CXCL6 thereby bridgin immunity against bac (9,12). IL-17A effects a subunits, IL-17RA (13) through activation of Phosphorylation of sc	nked, homodimeric, ,10). IL-17A stimula A also induces produ- ng adaptive and inn terial infections (9, appear to be exerte). IL-17 binding indu the Erk1/2 MAP kin ome Jaks and Stats l	pro-inflammatory cytol tes the production of the uction of the neutrophil late immunity (9,10). IL- 11) and has a putative ro d primarily through bind loces production of cytok ase, PI3K/Akt, p38, and has been observed.	kine produced by Th e pro-inflammatory chemoattractants Ii 17A is intimately inv ole in some autoimn ding to one of the IL ines, chemokines, a NF-κB pathways (11	17 cells, a distinct cytokines IL-1β, 8, CXCL1, and olved in mucosal nune disorders -17 receptor nd other proteins ,12,14).
Background R	eferences	1. Gaffen, S.L. (2009) <i>i</i> 2. Iwakura, Y. et al. (20 3. Hu, Y. et al. (2011) <i>i</i> 4. Fort, M.M. et al. (20 5. Yamaguchi, Y. et al. 6. Li, H. et al. (2000) <i>P</i> 7. Chang, S.H. et al. (2 8. Shalom-Barak, T. et 9. Kolls, J.K. and Lindé 10. Liang, S.C. et al. (2 11. Dubin, P.J. and Kol 12. Zrioual, S. et al. (2	Nat Rev Immunol 9, 011) Immunity 34, 1 Ann N Y Acad Sci 12 01) Immunity 15, 9 (2007) J Immunol 1 roc Natl Acad Sci U 2006) J Biol Chem 28 al. (1998) J Biol Chem an, A. (2004) Immun 006) J Exp Med 203 Ils, J.K. (2008) Immu 009) J Immunol 182	556-67. 49-62. 17, 60-76. 85-95. 79, 7128-36. 5 A 97, 773-8. 11, 35603-7. em 273, 27467-73. ity 21, 467-76. , 2271-9. nol Rev 226, 160-71. , 3112-20.		

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 IP: Immunoprecipitation FC-FP: Flow Cytometry (Fixed/Permeabilized)
Cross-Reactivity Key	M: Mouse
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