Members of the Janus family of tyrosine kinases (Jak1, Jak2, Jak3, and Tyk2) are activated by ligands binding to a number of associated cytokine receptors (1). Upon cytokine receptor activation, Jak proteins become autophosphorylated and phosphorylate their associated receptors to provide multiple binding sites for signaling proteins. These associated signaling proteins, such as Stats (2), Shc (3), insulin receptor substrates (4), and focal adhesion kinase (FAK) (5), typically contain SH2 or other phospho-tyrosine-

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse

writing by a legally authorized representative of CST, are rejected and are of no force or effect. Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry

H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the

following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in

Background

Background References

Species Reactivity

Western Blot Buffer

Cross-Reactivity Key

Applications Key

Trademarks and

Limited Uses

Patents

Jak2 (E4Y4D) Mouse mAb					Cell Signaling TECHNOLOGY® Orders: 877-616-CELL (2355)		
2					Support:	orders@cellsignal.com 877-678-TECH (8324)	
7498					Web:	info@cellsignal.com cellsignal.com	
#		3 Trask Lane Danvers Massachus				ssachusetts 01923 USA	
For Research Use Only.	Not for Use in	Diagnostic Proce	edures.				
Applications: WB, W-S, IP	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 125	Source/Isotype: Mouse IgG1	UniProt ID: #O60674	Entrez-Gene Id: 3717	
Product Usage Information	Application			Dilution			
	We	Western Blotting					
	Sin	Simple Western™				1:10 - 1:50	
	Imr	Immunoprecipitation			1:50		
Storage		Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.					
Specificity / Sensitivity Jak2 (E4Y4D) Mouse mAb recognizes endogenous levels of total Jak2 protein. This antibody do cross-react with human Jak1, Jak3, or Tyk2 proteins.						s antibody does not	
Source / Purification	on Mon	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to					

residues near the carboxy terminus of human Jak2 protein.

3. VanderKuur, J. et al. (1995) *J Biol Chem* 270, 7587-93. 4. Argetsinger, L.S. et al. (1995) *J Biol Chem* 270, 14685-92.

2. Darnell, J.E. (1997) Science 277, 1630-5.

5. Zhu, T. et al. (1998) J Biol Chem 273, 10682-9.

GP: Guinea Pig Rab: rabbit All: all species expected

1. Leonard, W.J. and O'Shea, J.J. (1998) Annu Rev Immunol 16, 293-322.

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

WB: Western Blotting W-S: Simple Western™ IP: Immunoprecipitation

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

information.

binding domains.

Jak2 (E4Y4D) Mouse mAb (#74987) Datasheet Without Images Cell Signaling Technology

end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.