Phospho-Stat3 (Ser727) (6E4) Mouse mAb



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O.02% sodium azide. Store at -20°C. Do not aliquot the antibody. Specificity/Sensitivity Phospho-Stat3 (Ser727) (6E4) Mouse mAb detects endogenous levels of Stat3 only when phosphorylated at serine 727. It does not significantly cross-react with the corresponding phosphorylated Serines of other Stat proteins. The antibody does not cross-react with nonphosphorylated Stat3 or with Stat3 phosphorylated at other sites. Source / Purification Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser727 of mouse Stat3. The Stat3 transcription factor is an important signaling molecule for many cytokines and grov receptors (1) and is required for murine fetal development (2). Research studies have shown to is constitutively activated in a number of human tumors (3,4) and possesses oncogenic poten and anti-apoptotic activities (3). Stat3 is activated by phosphorylation at Tyr705, which induce dimerization, nuclear translocation, and DNA binding (6,7). Transcriptional activation seems to regulated by phosphorylation at Ser727 through the MAPK or mTOR pathways (8,9). Stat3 isof expression appears to reflect biological function as the relative expression levels of Stat3g (65 Stat3g (79 kba) depend on cell type, ligand exposure, or cell maturation stage (10). It is notable Stat3g lacks the serine phosphorylation site within the carboxy-terminal transcriptional activationain (8). Background References 1. Heim, M.H. (2001) J Recept Signal Transduct Res 19, 75-120. 2. Takeda, K. et al. (1997) Proc Natl Acad Sci U S A 94, 3801-4. 3. Catlett-Falcone, R. et al. (1999) Immunity 10, 105-15. 4. Garcia, R. and Jove, R. (1998) J Biomed Sci S, 79-85. 5. Bromberg, J.F. et al. (1994) Seince 264, 1415-21. 7. Inle, J.N. (1995) Nature 377, 591-4. 8. Wen, Z. et al. (1994) Seince 264, 1415-21. 7. Inle, J.N. (1995) Nature 377, 591-4. 8. Wen, Z. et al. (1995) Cell 82, 241-50. 9. Yokogami, K. et al. (2000) Curr Biol 10, 47-50. 10. Biethahn, S. et al. (1994) Seince 264, 1	Applications: W	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 86	Source/Isotype: Mouse IgM	UniProt ID: #P40763	Entrez-Gene Id: 6774
O.02% sodium azide. Store at ~20°C. Do not aliquot the antibody. Phosphor-Stat3 (ser727) (6E4) Mouse mAb detects endogenous levels of Stat3 only when phosphorylated at serine 727. It does not significantly cross-react with the corresponding phosphorylated serines of other Stat proteins. The antibody does not cross-react with nonphosphorylated Stat3 or with Stat3 phosphorylated at other sites. Source / Purification Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser727 of mouse Stat3. Background The Stat3 transcription factor is an important signaling molecule for many cytokines and grow receptors (1) and is required for murine fetal development (2). Research studies have shown to is constitutively activated in a number of human tumors (3,4) and possesses oncogenic potential and anti-apoptotic activities (3). Stat3 is activated by phosphorylation at Tyr705, which induces dimerization, nuclear translocation, and DNA binding (6,7). Transcriptional activation seems to regulated by phosphorylation at Tyr705, which induces the regulated by phosphorylation at Ser727 through the MAPK or mTOR pathways (8,9). Stat3 (86 Stat38) (79 KDa) depend on cell type, ligand exposure, or cell maturation stage (10). It is notable Stat38 lacks the serine phosphorylation site within the carboxy-terminal transcriptional activation and in (8). Background References 1. Heim, M.H. (2001) / Recept Signal Transduct Res 19, 75-120. 2. Takeda, K. et al. (1997) Proc Natl Acad Sci U S A 94, 3801-4. 3. Catlett-Falcone, R. et al. (1999) / Immunity (1), 105-15. 4. Garcia, R. and Jove, R. (1998) / Biomed Sci S, 79-985. 5. Bromberg, J.F. et al. (1999) Cell 98, 295-303. 6. Darnell, J.E. et al. (1999) Cell 98, 295-303. 6. Darnell, J.E. et al. (1999) (Sci Pla 2, 241-50. 9. Yokogami, K. et al. (2000) Curr Biol 10, 47-50. 10. Biethahn, S. et al. (1999) Exp Hematol 27, 885-94. Species Reactivity Species reactivity is determined by testing in at least one approved applicati			• •				
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The Stat3 transcription factor is an important signalling molecule for many cytokines and grov receptors (1) and is required for murine fetal development (2). Research studies have shown to is constitutively activated in a number of human tumors (3,4) and possesses oncogenic poten and anti-apoptotic activities (3). Stat3 is activated by phosphorylation at Tyr705, which induces dimerization, nuclear translocation, and DNA binding (6,7). Transcriptional activation seems to regulated by phosphorylation at Ser727 through the MAPK or mTOR pathways (8,9). Stat3 is of expression appears to reflect biological function as the relative expression levels of Stat3a (86 Stat38) (79 kDa) depend on cell type, ligand exposure, or cell maturation stage (10). It is notable Stat3B lacks the serine phosphorylation site within the carboxy-terminal transcriptional activa domain (8). Background References 1. Heim, M.H. (2001) J Recept Signal Transduct Res 19, 75-120. 2. Takeda, K. et al. (1997) Proc Natl Acad Sci U S A 94, 3801-4. 3. Catlett-Falcone, R. et al. (1999) Immunity 10, 105-15. 4. Garcia, R. and Jove, R. (1998) J Biomed Sci 5, 79-85. 5. Bromberg, J.F. et al. (1999) Cell 98, 295-303. 6. Darnell, J.E. et al. (1994) Science 264, 1415-21. 7. Ihle, J.N. (1995) Nature 377, 591-4. 8. Wen, Z. et al. (1995) Cell 82, 241-50. 9. Yokogami, K. et al. (1999) Exp Hematol 27, 885-94. Species Reactivity Species reactivity is determined by testing in at least one approved application (e.g., western I MPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight. Applications Key W: Western Blotting H: Human M: Mouse	Specificity/Sensitivity		phosphorylated at serine 727. It does not significantly cross-react with the corresponding phosphorylated serines of other Stat proteins. The antibody does not cross-react with				
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Western Blot Buffer IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight. W: Western Blotting Cross-Reactivity Key H: Human M: Mouse	Background References		2. Takeda, K. et al. (19 3. Catlett-Falcone, R. e 4. Garcia, R. and Jove, 5. Bromberg, J.F. et al 6. Darnell, J.E. et al. (1 7. Ihle, J.N. (1995) <i>Nat</i> 8. Wen, Z. et al. (1995 9. Yokogami, K. et al.	197) Proc Natl Acad et al. (1999) Immun R. (1998) J Biomed . (1999) Cell 98, 295 994) Science 264, 1 ture 377, 591-4.) Cell 82, 241-50. (2000) Curr Biol 10,	Sci U S A 94, 3801-4. ity 10, 105-15. Sci 5, 79-85. -303. 415-21.		
dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight. Applications Key W: Western Blotting Cross-Reactivity Key H: Human M: Mouse	Species Reactivity		Species reactivity is determined by testing in at least one approved application (e.g., western blot).				
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	Applications Key		W: Western Blotting				
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