Phospho-Stat1 (Tyr701) (D4A7) Rabbit mAb (PE Conjugate)



877-616-CELL (2355)

orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com

cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Source/Isotype: Applications: Reactivity: Sensitivity: **UniProt ID:** Entrez-Gene Id: FC-FP $\mathsf{H}\,\mathsf{M}\,\mathsf{R}$ Endogenous Rabbit IgG #P42224 6772

Product Usage Application Dilution Information Flow Cytometry (Fixed/Permeabilized) 1:50

Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the **Storage**

antibody. Protect from light. Do not freeze.

Specificity / Sensitivity Phospho-Stat1 (Tyr701) (D4A7) Rabbit mAb (PE Conjugate) recognizes endogenous levels of Stat1

protein only when phosphorylated at Tyr701.

Species predicted to react based on 100% sequence homology: Monkey

Source / Purification Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to

residues surrounding Tyr701 of human Stat1 protein.

This Cell Signaling Technology antibody is conjugated to phycoerythrin (PE) and tested in-house for direct **Product Description**

flow cytometry analysis in human cells. This antibody is expected to exhibit the same species cross-

reactivity as the unconjugated Phospho-Stat1 (Tyr701) (D4A7) Rabbit mAb #7649.

Background The Stat1 transcription factor is activated in response to a large number of ligands (1) and is essential for

responsiveness to IFN-α and IFN-γ (2,3). Phosphorylation of Stat1 at Tyr701 induces Stat1 dimerization, nuclear translocation, and DNA binding (4). Stat1 protein exists as a pair of isoforms, Stat1α (91 kDa) and the splice variant Stat1 β (84 kDa). In most cells, both isoforms are activated by IFN- α , but only Stat1 α is activated by IFN-y. The inappropriate activation of Stat1 occurs in many tumors (5). In addition to tyrosine phosphorylation, Stat1 is also phosphorylated at Ser727 through a p38 mitogen-activated protein kinase (MAPK)-dependent pathway in response to IFN-α and other cellular stresses (6). Serine phosphorylation

may be required for the maximal induction of Stat1-mediated gene activation.

1. Heim, M.H. (1999) J Recept Signal Transduct Res 19, 75-120. **Background References**

2. Durbin, J.E. et al. (1996) Cell 84, 443-50.

3. Meraz, M.A. et al. (1996) Cell 84, 431-42.

4. Ihle, J.N. et al. (1994) Trends Biochem Sci 19, 222-7.

5. Frank, D.A. (1999) Mol Med 5, 432-56.

6. Wen, Z. et al. (1995) Cell 82, 241-50.

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

Applications Key FC-FP: Flow Cytometry (Fixed/Permeabilized)

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

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

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

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

Trademarks and

Patents

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

information.

Limited Uses

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 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 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 any trademarks, trade names, logos, patent or copyright notices or markings, (d) use 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.