#6444 Store at +40

## TCF1/TCF7 (C63D9) Rabbit mAb (Alexa Fluor® 488 Conjugate)



Orders: 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.

Applications:Reactivity:Sensitivity:Source/Isotype:UniProt ID:Entrez-Gene Id:FC-FPH MEndogenousRabbit IgG#P364026932

Product Usage<br/>InformationApplicationDilutionFlow Cytometry (Fixed/Permeabilized)1:50

**Storage** 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 antibody. Protect from light. Do not freeze.

Specificity / Sensitivity

TCF1/TCF7 (C63D9) Rabbit mAb (Alexa Fluor® 488 Conjugate) detects endogenous levels of total TCF1/TCF7 protein. This antibody does not recognize the dominant negative isoforms of TCF1/TCF7

lacking the amino-terminal  $\beta$ -catenin binding domain and does not cross-react with LEF1.

**Source / Purification**Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to a region surrounding Pro95 of human TCF1/TCF7 protein.

**Product Description**This Cell Signaling Technology antibody is conjugated to Alexa Fluor<sup>®</sup> 488 fluorescent dye and tested inhouse for direct flow cytometry analysis in human cells. This antibody is expected to exhibit the same

species cross-reactivity as the unconjugated TCF1/TCF7 (C63D9) Rabbit mAb #2203.

**Background**LEF1 and TCF are members of the high mobility group (HMG) DNA-binding protein family of transcription

factors that consists of the following: Lymphoid Enhancer Factor 1 (LEF1), T Cell Factor 1 (TCF1/TCF7), TCF3/TCF7L1, and TCF4/TCF7L2 (1). LEF1 and TCF1/TCF7 were originally identified as important factors that regulate early lymphoid development (2) and act downstream in Wnt signaling. LEF1 and TCF bind to Wnt response elements to provide docking sites for  $\beta$ -catenin, which translocates to the nucleus to promote the transcription of target genes upon activation of Wnt signaling (3). LEF1 and TCF are dynamically expressed during development and aberrant activation of the Wnt signaling pathway is involved in many types of cancers, including colon cancer (4,5).

TCF1/TCF7 has several isoforms due to alternative splicing and transcription from an alternative promoter. The isoforms generated by the alternative promoter do not contain the amino-terminal  $\beta$ -catenin binding domain and therefore may function in a dominant negative manner (6). TCF1/TCF7 displays dynamic expression both in the total amount and the type of isoforms expressed in T cells during development and differentiation (7).

Background References 1. Waterma

- 1. Waterman, M.L. (2004) Cancer Metastasis Rev 23, 41-52.
- 2. Schilham, M.W. and Clevers, H. (1998) Semin Immunol 10, 127-32.
- 3. Brantjes, H. et al. (2002) Biol Chem 383, 255-61.
- 4. Reya, T. and Clevers, H. (2005) Nature 434, 843-50.
- 5. Logan, C.Y. and Nusse, R. (2004) Annu Rev Cell Dev Biol 20, 781-810.
- 6. Waterman, M.L. (2004) Cancer Metastasis Rev 23, 41-52.
- 7. Willinger, T. et al. (2006) *J Immunol* 176, 1439-46.

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

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

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

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

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. Alexa Fluor is a registered trademark of Life Technologies Corporation.

This product is provided under an intellectual property license from Life Technologies Corporation. The transfer of this product is conditioned on the buyer using the purchased product solely in research conducted by the buyer, excluding contract research or any fee for service research, and the buyer must not (1) use this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; or (c) manufacturing or quality assurance or quality control, and/or (2) sell or transfer this product or its components for resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.

U.S. Patent No. 7,429,487, foreign equivalents, and child patents deriving therefrom.

**Limited Uses** 

information.

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.

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

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.