

#2115 Store at -20°C

# SRC-3 (11B1) Mouse mAb



✓ 100 µl  
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

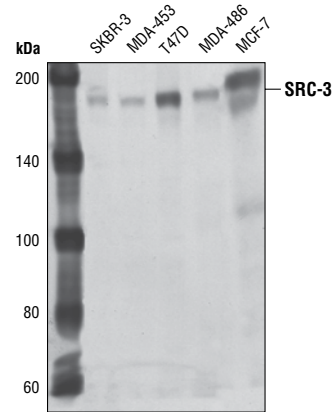
Entrez-Gene ID #8202  
Swiss-Prot Acc. #Q9Y6Q9

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IF-IC, F Endogenous	H	160 kDa	Mouse IgG1 and κ light chain**

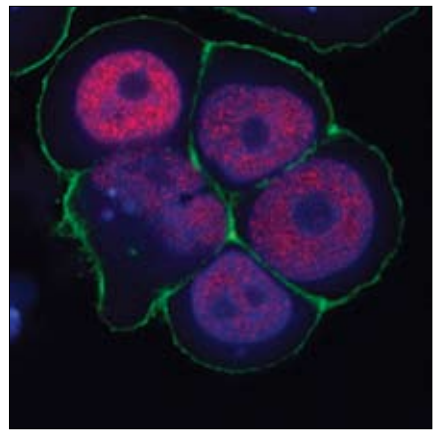
**Background:** There are three members of the steroid receptor co-activator (SRC) family of proteins: SRC-1 (NCoA-1), SRC-2 (TIF2/GRIPI/NCoA-2) and SRC-3 (ACTR/pCIP/RAC3/TRAM-1/AIB1). The SRC family members all share significant structural homology and function in a similar fashion to stimulate transcription mediated by nuclear hormone receptors and other transcriptional activators such as STAT3, NF-κB, E2F1 and p53 (1-4). Two SRC proteins, SRC-1 and SRC-3, function as histone acetyltransferases (5,6). In addition, all three family members can recruit other histone acetyltransferases (CBP/p300, PCAF) and histone methyltransferases (PRMT1, CARM1) to target promoters and cooperate to enhance expression of many genes (5-8). The SRC proteins play important roles in multiple physiological processes including cell proliferation, cell survival, somatic cell growth, mammary gland development, female reproductive function and vasoprotection (9). SRC-1 and SRC-3 are conduits for kinase-mediated growth factor signaling to the estrogen receptor and other transcriptional activators. Seven SRC-1 phosphorylation sites and six SRC-3 phosphorylation sites have been identified, which are induced by steroids, cytokines and growth factors and involve multiple kinase signaling pathways (9-11). All three SRC family members are associated with increased activity of nuclear receptors in breast, prostate and ovarian carcinomas. In addition, SRC-3 is frequently amplified or over-expressed in a number of cancers (12), and SRC-1/PAX3 and SRC-2/MYST3 translocations are found associated with rhabdomyosarcomas and acute myeloid leukemias, respectively (13,14).

**Specificity/Sensitivity:** SRC-3 (11B1) Mouse mAb detects endogenous levels of total SRC-3 protein.

**Source/Purification:** Monoclonal antibodies are produced by immunizing animals with recombinant human SRC-3 polypeptide fragment (a.a. 1-250).



Western blot analysis of cell extracts from various cell lines, using SRC-3 (11B1) Mouse mAb.



Confocal immunofluorescence images of MCF-7 cells labeled with SRC-3 (11B1) Mouse mAb (red). Actin filaments have been labeled with fluorescein phalloidin. Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

**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.

\*Species cross-reactivity is determined by western blot.

\*\*Anti-mouse secondary antibodies must be used to detect this antibody.

**Recommended Antibody Dilutions:**

Western blotting	1:1000
Immunofluorescence (IF-IC)	1:50
Flow Cytometry	1:100

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

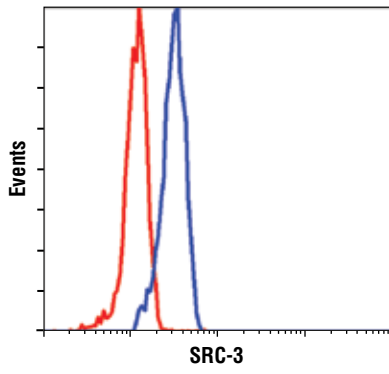
Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.

**Background References:**

- (1) Giraud, S. et al. (2002) *J. Biol. Chem.* 277, 8004-8011.
- (2) Na, S.Y. et al. (1998) *J. Biol. Chem.* 273, 10831-10834.
- (3) Louie, M.C. et al. (2004) *Mol. Cell Biol.* 24, 5157-5171.
- (4) Lee, S.K. et al. (1999) *Mol. Endocrinol.* 13, 1924-1933.
- (5) Spencer, T.E. et al. (1997) *Nature* 389, 194-198.
- (6) Chen, H. et al. (1997) *Cell* 90, 569-580.
- (7) Koh, S.S. et al. (2001) *J. Biol. Chem.* 276, 1089-1098.
- (8) Chen, D. et al. (1999) *Science* 284, 2174-2177.
- (9) Wu, R.C. et al. (2004) *Mol. Cell* 15, 937-949.
- (10) Rowan, B.G. et al. (2000) *J. Biol. Chem.* 275, 4475-4483.
- (11) Zhou, H.J. et al. (2005) *Cancer Res.* 65, 7976-7983.
- (12) Torres-Arzayus, M.I. et al. (2004) *Cancer Cell* 6, 263-274.
- (13) Wachtel, M. et al. (2004) *Cancer Res.* 64, 5539-5545.
- (14) Deguchi, K. et al. (2003) *Cancer Cell* 3, 259-271.

**IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.**

**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey 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 All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.



*Flow cytometric analysis of MCF-7 cells, using SRC-3 (11B1) Mouse mAb (blue) compared to a nonspecific negative control antibody (red).*