

SRC-1 Blocking Peptide

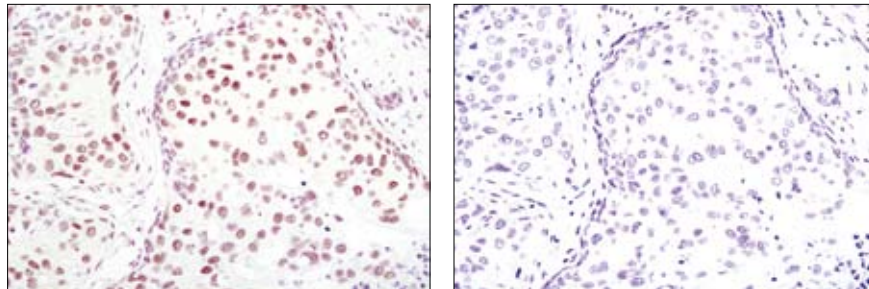
✓ 100 µg

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rev. 07/30/08

This product is for *in vitro* research use only and is not intended for use in humans or animals. This product is not intended for use as a therapeutic or in diagnostic procedures.

Entrez-Gene ID #8648
Swiss-Prot Acc. #Q15788



Immunohistochemical analysis of paraffin-embedded human breast carcinoma using SRC-1 (128E7) Rabbit mAb #2191 in the presence of control peptide (left) or SRC-1 Blocking Peptide (right).

Storage: Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. Store at -20°C.

Companion Products:
 SRC-1 (128E7) Rabbit mAb #2191

Description: This peptide is used to block SRC-1 (128E7) Rabbit mAb #2191 reactivity in immunohistochemistry protocols.

Background: There are three members of the steroid receptor co-activator (SRC) family of proteins: SRC-1 (NCoA-1), SRC-2 (TIF2/GRIP1/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 rhabdomyosarcoma and acute myeloid leukemia, respectively (13,14).

Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks SRC-1 (128E7) Rabbit mAb #2191 by immunohistochemistry.

Directions for Use: For immunohistochemistry, add twice the volume of peptide as volume of antibody used in 100 µl total volume. Incubate for a minimum of 30 minutes prior to adding the entire volume to the slide. Recommended antibody dilutions can be found on the relevant product data sheet.

Background References:

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