

BACKGROUND

Nuclear hormone receptors are ligand-dependent transcription factors that require coactivators to regulate target gene expression. The steroid receptor coactivator-3 (SRC-3), also known as p/CIP, RAC3, AIB1, ACTR and TRAM-1, is a cancer-amplified coactivator in the SRC gene family which also includes SRC-1 and SRC-2. SRC-3 interacts with nuclear receptors and a subset of transcription factors, recruits histone acetyltransferases and methyltransferases for chromatin remodeling, and facilitates target gene transcription¹. SRC-3 phosphorylation and methylation have been shown to regulate coactivator complex assembly.^{2,3} Accumulated results from both *ex vivo* and animal model studies indicate that SRC-3 plays important roles in many biological processes involving cell proliferation, cell migration, cell differentiation, somatic growth, sexual maturation, female reproductive function, and vasoprotection.¹ Moreover, SRC-3 has been associated with multiple cancers, including breast, gastric and prostate cancers.⁴ The phosphorylation of Thr24 in SRC-3 can be mediated by activation of MAP kinase pathway, which may regulate function and localization of SRC-3 proteins in cells.⁵

References:

1. Liao, L. et al.: J Steroid Biochem Mol Biol 83:3, 2002.
2. Feng, Q. et al.: Mol Cell Biol 26:7846, 2006.
3. Wu, H. et al.: J Biol Chem 281:21848, 2006.
4. Yan, J. et al.: Acta Pharmacol Sin 27:387, 2006.
5. Wu, R.C. et al.: Mol. Cell 5:937-49, 2004.

TECHNICAL INFORMATION

Source:

Affinity purified Phospho-SRC-3 (Thr24) Antibody is a rabbit polyclonal antibody raised against the epitope surrounding and including Thr24 of human SRC-3/AIB-1 sequence.

Specificity and Sensitivity:

This antibody detects endogenous phospho-human and mouse SRC-3/AIB-1.

Storage Buffer: PBS and 30% glycerol

Storage:

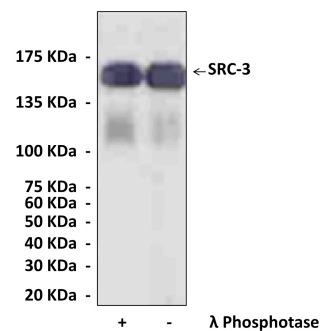
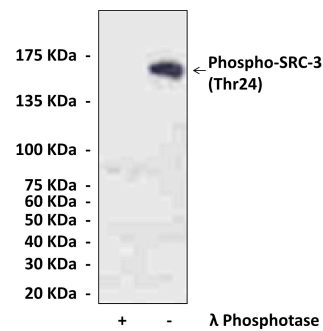
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

| Application: | *Dilution: |
|----------------|------------|
| WB | 1:1000 |
| IP | n/d |
| IHC (Paraffin) | n/d |
| ICC | n/d |
| FACS | n/d |

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Neuregulin-stimulated MCF-7 cell lysates were treated with lambda phosphatase and subjected to Western Blot analysis using anti-phospho-SRC-3 (Thr24) rabbit polyclonal antibody (Cat.# CC1248) (**Top**), or anti-SRC-3 monoclonal antibody (Cat# CA10247) (**Bottom**).

