

Stat5 Control Cell Extracts

✓ Controls for 10 Western mini-blot

Orders ■ 877-616-CELL (2355)
orders@cellsignaling.com

Support ■ 877-678-TECH (8324)
info@cellsignaling.com

Web ■ www.cellsignaling.com

rev 11/19/07

This product is for *in vitro* research use only and is not intended for use in humans or animals.

Background: Stat5 is activated in response to a wide variety of ligands including IL-2, GM-CSF, growth hormone and prolactin. Phosphorylation at Tyr694 is obligatory for Stat5 activation (1,2). This phosphorylation is mediated by Src upon erythropoietin stimulation (3). Stat5 has been found to be constitutively active in some leukemic cell types (4). Phosphorylated Stat5 is found in some endothelial cells treated with IL-3, which suggests its involvement in angiogenesis and cell motility (5). Stat5 α and β are independently regulated and activated in various cell types. For instance, both isoforms are activated in response to IFN- α in B cells, but only Stat5 α is phosphorylated in response to IFN- α in HeLa cells (6).

Description:

Nonphosphorylated Stat5 Cell Extracts: Total cell extracts from serum-starved HeLa cells prepared without treatment serve as a negative control. Supplied in SDS Sample Buffer. Store at -20°C.

Phosphorylated Stat5 Cell Extracts: Total cell extracts from serum-starved HeLa cells prepared with IFN- α treatment serve as a positive control. Supplied in SDS Sample Buffer. Store at -20°C.

Applications: As controls, CST recommends using 10 μ l of phosphorylated and nonphosphorylated Stat5 extracts.

Background References:

- (1) Gouilleux, F. et al. (1994) *EMBO J.* 13, 4361–4369.
- (2) Wakao, H. et al. (1994) *EMBO J.* 13, 2182–2191.
- (3) Okutani, Y. et al. (2001) *Oncogene* 20, 6643–6650.
- (4) Demoulin, J.B. et al. (1999) *J. Biol. Chem.* 274, 25855–25861.
- (5) Dentelli, P. et al. (1999) *J. Immunol.* 163, 2151–2159.
- (6) Meinke, A. et al. (1996) *Mol. Cell. Biol.* 16, 6937–6944.

Entrez-Gene ID #6776

Swiss-Prot Acc. #P42229

Storage: Supplied in SDS Sample Buffer; 62.5 mM Tris-HCl (pH=6.8 at 25°C), 2% w/v SDS, 10% glycerol, 50 mM DTT, 0.01% bromophenol blue. Store at -20°C. For long term, store at -80°C.

***Species cross-reactivity is determined by Western blot.**

Companion Products:

Phospho-Stat5 (Tyr694) Antibody #9351

Phospho-Stat5(Tyr694) (14H2) Mouse mAb #9356

Phospho-Stat3 (Tyr705) Antibody #9131

Stat3 Antibody #9132

Phospho-Stat1 (Tyr701) Antibody #9171

Stat1 Antibody #9172

Stat5 Antibody #9363

Anti-rabbit IgG, HRP-linked Antibody #7074

Anti-mouse IgG, HRP-linked Antibody #7076

Prestained Protein Marker, Broad Range (Premixed Format) #7720

Biotinylated Protein Ladder #7727

20X LumiGLO® Reagent and 20X Peroxide #7003

