

# Stat5 Control Cell Extracts

✓ Controls for 10 western blots



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**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 $\alpha$  and  $\beta$  are independently regulated and activated in various cell types. For instance, both isoforms are activated in response to IFN- $\alpha$  in B cells, but only Stat5 $\alpha$  is phosphorylated in response to IFN- $\alpha$  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-alpha treatment serve as a positive control. Supplied in SDS Sample Buffer. Store at -20°C.

**Western Blots:** CST recommends using 10  $\mu$ l of phosphorylated and nonphosphorylated Stat5 control cell extracts as controls. Boil for 3 minutes prior to the first use.

#### 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

UniProt ID #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.

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