## Anti- phospho-Stat3(Y705)


#### Abstract

Background : Signal transducer and activator of transcription (STAT), named after their dual role, are latent cytoplasmic transcription factors that mediate various biological responses. The activation of STAT proteins is largely mediated by phosphorylation of C-terminal transactivation domain through Janus kinases (JAKs) and mitogen-activated protein kinases (MAPKs), which allows the activated STATs to dimerize and to translocate into the nucleus. By modulating target gene expression, STAT proteins play an important role in mediating a broad range of biological processes such as cell proliferation, survival, apoptosis, and differentiation. Seven mammalian members of the STAT family are known (STAT1, 2, 3, 4, 5a, 5b, and 6) and they all share common features and structure. STAT3 is activated by growth factors and oncogenic kinases where it mediates transcriptional activation of genes encoding apoptosis inhibitors, cell-cycle regulators and inducers of angiogenesis.


Immunogen : Synthetic peptide
Host : Rabbit
Type : Antiserum
Isotype : IgG
Size : $100 \mu \ell$
Compositon : Hepes with 0.15 M NaCl , $0.01 \%$ BSA, $0.05 \%$ Sodium azide and $50 \%$ glycerol

Positive control : HeLa cell lysate treated with IFN alpha

Storage : Store for 1 year at $-20^{\circ} \mathrm{C}$ from date of shipment.

Species cross reactivity


## Applications :

Western blotting (1: 2,000)

## Background Reference :

1) Aggarwal BB, et al, Ann N Y Acad Sci. 2006; vol.1091: p.151-69.
2) Gao SP, Bromberg JF. Sci STKE. 2006; vol.2006(343): pe30.
3) Inghirami G, et al, Cell Cycle. 2005; vol.4(9): p.1131-3.
4) Jing N, Tweardy DJ. Anticancer Drugs. 2005; vol.16(6): p.601-7.
