

## PRODUCT DATA SHEET

**Product:** Anti-STAT3 pAb

**Cat. No.:** PC-431 (200  $\mu$ L)

**Synonyms:**

Anti-signal transducer and activator of transcription 3.

**Background:**

STAT3 is an 88 kD member of the STAT (signal transducer and activators of transcription) protein family that is phosphorylated in response to cytokine receptor-associated kinase activity. Phosphorylation of STAT3 induces nuclear translocation to activate transcription. STAT3 is expressed in brain, heart, placenta, lung, liver, skeletal muscle, kidney, and pancreas. STAT3 forms both homo- and heterotrimers and is involved in the activation of genes required for cell growth and apoptosis. STAT3 is also involved in gp130 signaling and binds to IL-6 response elements in various acute phase protein promoters. STAT3 is phosphorylated by signaling from IFNs, EGF, FGF, IL-5, HGF, LIF, and BMP2. STAT3 activity is inhibited by PIAS3 and GRIM-19 and can also be regulated by Rac1 protein. STAT3 interacts with Rac1, STAT 1, and NCOA1 proteins.

**Immunogen:**

Peptide mapping to the carboxy-terminus of human STAT3 p92.

**Molecular Weight of Antigen:**

88 kDa

**Host:**

Rabbit

**Specificity:**

Recognizes STAT3. Does not react with STAT3b.

**Species Reactivity:**

Human, mouse and rat. Others not tested.

**Format:**

200  $\mu$ L containing rabbit IgG in PBS, pH 7.2, with 0.09% sodium azide and 0.2% gelatin. Purified by antigen-affinity chromatography.

**Storage:**

Store at 4°C. Do not freeze.

**Application:**

- Immunoprecipitation
- Immunohistochemistry
- Western blot: Use at 10  $\mu$ L per 5 mL antibody dilution buffer for each mini-gel.

The optimal dilution for a specific application should be determined by the researcher.

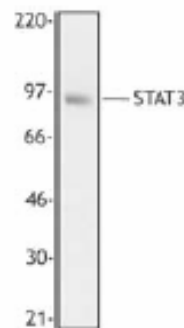


Figure: HeLa cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with rabbit anti-STAT3 polyclonal antibody PC-431. Proteins were visualized using a donkey anti-rabbit secondary antibody conjugated to HRP and a chemiluminescence system.

**Limitations:**

For *in vitro* research use only. Not for use in diagnostics or in humans.

**Warranty:**

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.