

## Stat3 Polyclonal Antibody

### Description

<b>Product type</b>	Primary Antibody
<b>Code</b>	BT-AP08630
<b>Host</b>	Rabbit
<b>Isotype</b>	IgG
<b>Size</b>	20ul, 50ul, 100ul
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human STAT3. AA range:694-743
<b>Mol wt</b>	88068
<b>Species reactivity</b>	Human, Mouse, Rat
<b>Clonality</b>	Polyclonal
<b>Recommended application</b>	WB, IHC-p, IF, ELISA
<b>Concentration</b>	1 mg/ml
<b>Full name</b>	Stat3 Antibody
<b>Synonyms</b>	STAT3; APRF; Signal transducer and activator of transcription 3; Acute-phase response factor

**This product is for research use only, not for use in human, therapeutic or diagnostic procedure.**

### Background

Signal transducer and activator of transcription 3 encoded by STAT3 is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. This protein is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. This protein mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of this protein. PIAS3 protein is a specific inhibitor of this protein. Mutations in this gene are associated with infantile-onset multisystem autoimmune disease and hyper-immunoglobulin E syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

### Recommended Dilution

WB: 1: 500 - 1: 2000

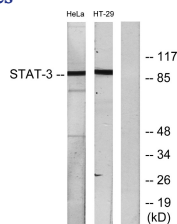
IHC: 1: 100 - 1: 300

IF: 1: 200 - 1: 1000

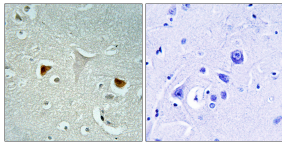
ELISA: 1: 10000

Not yet tested in other applications.

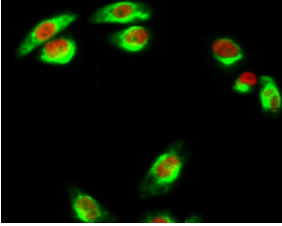
### Images



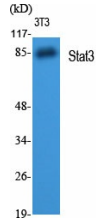
Western blot analysis of lysates from HeLa and HT-29 cells, using STAT3 Antibody. The lane on the right is blocked with the synthesized peptide.



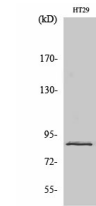
Immunohistochemistry analysis of paraffin-embedded human brain tissue, using STAT3 Antibody.  
The picture on the right is blocked with the synthesized peptide.



Immunofluorescence analysis of HeLa cell. 1, Stat3 Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). Caspase-8 Monoclonal Antibody (2G12) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 was diluted at 1:1000 (room temperature, 50min).



Western Blot analysis of various cells using Stat3 Polyclonal Antibody diluted at 1:2000



Western Blot analysis of NIH-3T3 cells using Stat3 Polyclonal Antibody diluted at 1:2000

### Storage

-20°C for one year

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