

Datasheet for ABIN6265317

**anti-STAT3 antibody (C-Term)**

7 Images

3 Publications

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## Overview

|                      |  |
|----------------------|--|
| Quantity:            | 100 µL   |
| Target:              | STAT3  |
| Binding Specificity: | C-Term   |
| Reactivity:          | Human, Mouse, Rat  |
| Host:                | Rabbit   |
| Clonality:           | Polyclonal   |
| Conjugate:           | This STAT3 antibody is un-conjugated   |
| Application:         | Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC) |

## Product Details

|                       |   |
|-----------------------|---|
| Immunogen:            | A synthesized peptide derived from human STAT3, corresponding to a region within C-terminal amino acids.                  |
| Isotype:              | IgG   |
| Specificity:          | STAT3 Antibody detects endogenous levels of total STAT3.  |
| Predicted Reactivity: | Pig,Bovine,Horse,Sheep,Rabbit,Chicken   |
| Purification:         | The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific). |

## Target Details

|         |       |
|---------|-------|
| Target: | STAT3 |
|---------|-------|

## Target Details

Alternative Name: STAT3 ([STAT3 Products](#))

Background: Description: Signal transducer and transcription activator that mediates cellular responses to interleukins, KITLG/SCF, LEP and other growth factors (PubMed:10688651, PubMed:12359225, PubMed:12873986, PubMed:15194700, PubMed:17344214, PubMed:18242580, PubMed:23084476). Once activated, recruits coactivators, such as NCOA1 or MED1, to the promoter region of the target gene (PubMed:17344214). May mediate cellular responses to activated FGFR1, FGFR2, FGFR3 and FGFR4 (PubMed:12873986). Binds to the interleukin-6 (IL-6)-responsive elements identified in the promoters of various acute-phase protein genes (PubMed:12359225). Activated by IL31 through IL31RA (PubMed:15194700). Acts as a regulator of inflammatory response by regulating differentiation of naive CD4+ T-cells into T-helper Th17 or regulatory T-cells (Treg): deacetylation and oxidation of lysine residues by LOXL3, leads to disrupt STAT3 dimerization and inhibit its transcription activity (PubMed:28065600). Involved in cell cycle regulation by inducing the expression of key genes for the progression from G1 to S phase, such as CCND1 (PubMed:17344214). Mediates the effects of LEP on melanocortin production, body energy homeostasis and lactation (By similarity). May play an apoptotic role by transactivating BIRC5 expression under LEP activation (PubMed:18242580). Cytoplasmic STAT3 represses macroautophagy by inhibiting EIF2AK2/PKR activity (PubMed:23084476). Plays a crucial role in basal beta cell functions, such as regulation of insulin secretion (By similarity).

Gene: STAT3

Molecular Weight: 86kDa

Gene ID: 6774

UniProt: [P40763](#)

Pathways: [JAK-STAT Signaling](#), [RTK Signaling](#), [Interferon-gamma Pathway](#), [Neurotrophin Signaling Pathway](#), [Dopaminergic Neurogenesis](#), [Response to Growth Hormone Stimulus](#), [Carbohydrate Homeostasis](#), [Stem Cell Maintenance](#), [Hepatitis C](#), [Protein targeting to Nucleus](#), [Feeding Behaviour](#), [CXCR4-mediated Signaling Events](#), [Signaling of Hepatocyte Growth Factor Receptor](#)

## Application Details

Application Notes: WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

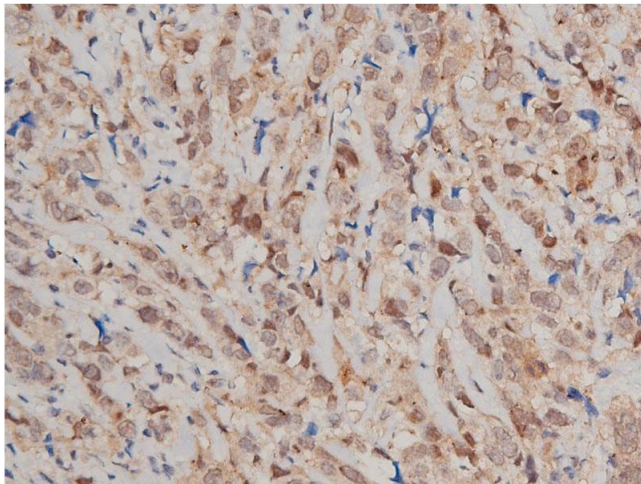
Restrictions: For Research Use only

## Handling

|                    |  |
|--------------------|--|
| Format:            | Liquid   |
| Concentration:     | 1 mg/mL  |
| Buffer:            | Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.                  |
| Preservative:      | Sodium azide   |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage:           | -20 °C   |
| Storage Comment:   | Store at -20 °C. Stable for 12 months from date of receipt.  |
| Expiry Date:       | 12 months  |

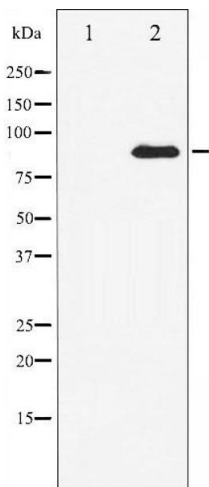
## Publications

|                   |   |
|-------------------|---|
| Product cited in: | <p>Deng, Bu, Mo, Lv, Song, Xiao, Dan, Yang: "Huang Gan Formula Eliminates the Oxidative Stress Effects of Advanced Oxidation Protein Products on the Divergent Regulation of the Expression of AGEs Receptors via the JAK2/STAT3 Pathway." in: <b>Evidence-based complementary and alternative medicine : eCAM</b>, Vol. 2017, pp. 4520916, (2018) (<a href="#">PubMed</a>).</p> <p>Chai, Bai, Li, Chen, Zhang: "Biological functions of lung cancer cells are suppressed in co-culture with mesenchymal stem cells isolated from umbilical cord." in: <b>Experimental and therapeutic medicine</b>, Vol. 15, Issue 1, pp. 1076-1080, (2018) (<a href="#">PubMed</a>).</p> <p>Wang, Li, Chen, Yang: "Umbilical cord-derived mesenchymal stem cells can inhibit the biological functions of melanoma A375 cells." in: <b>Oncology reports</b>, Vol. 40, Issue 1, pp. 511-517, (2018) (<a href="#">PubMed</a>).</p> |
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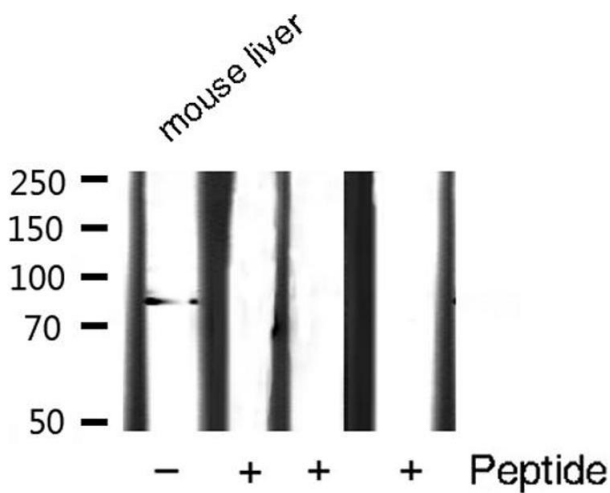
### Immunohistochemistry

**Image 1.** ABIN6269240 at 1/200 staining human breast cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



### Western Blotting

**Image 2.** Western blot analysis of STAT3 expression in HeLa whole cell lysates. The lane on the left is treated with the antigen-specific peptide.



### Western Blotting

**Image 3.** Western blot analysis of STAT3 expression in Mouse liver lysate

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN6265317.