## **Product Datasheet**

# Phospho-STAT3 (Tyr705) (5E9) Mouse mAb

Catalog No: AB3590 Reactivity: Human Isotype: Mouse IgG1 Applications: IHC



www.abways.com

#### Information

UniProt ID: P40763

All Names: STAT3; APRF; Signal transducer and activator of transcription 3; Acute-phase response factor

Form: Liquid

Storage instructions: Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

**Storage buffer:** pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Purity:** Affinity-chromatography **Immunogen:** A synthesized peptide

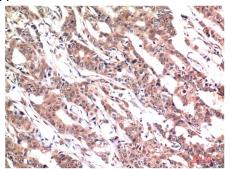
Molecular Wt.: 79,86kDa

## Application

IHC: 1/50-1/100

### Background

Swiss-Prot Acc.P40763.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 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. May play an apoptotic role by transctivating 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



Immunohistochemistry analysis of paraffinembedded Human Breast Carcinoma Tissue using PhosphoSTAT3 (Tyr705) (5E9) antibody.

For Research Use Only. Not For Use In Diagnostic Procedures. www.abways.com