

Stat3 Polyclonal Antibody

Catalog # AP72626

Product Information

Application	IF, ICC, WB, IHC-P, E
Primary Accession	P40763
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

Additional Information

Other Names	STAT3; APRF; Signal transducer and activator of transcription 3; Acute-phase response factor
Dilution	IF~~IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications. ICC~~N/A WB~~IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~IF: 1:50-200 Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

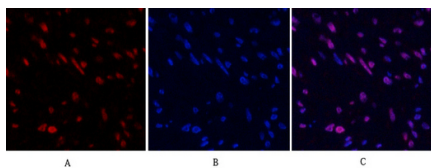
Protein Information

Background

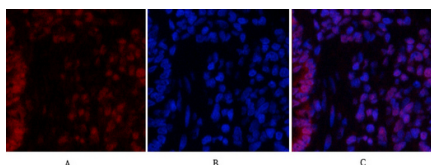
Signal transducer and transcription activator that mediates cellular responses to interleukins, KITLG/SCF, LEP and other growth factors (PubMed:[10688651](#), PubMed:[12359225](#), PubMed:[12873986](#), PubMed:[15194700](#), PubMed:[17344214](#), PubMed:[18242580](#), PubMed:[23084476](#)). Once activated, 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).

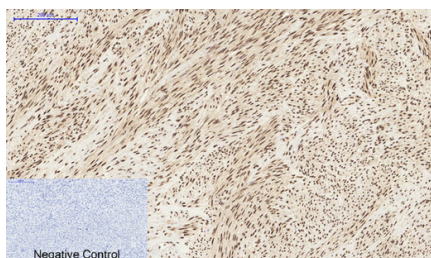
Images



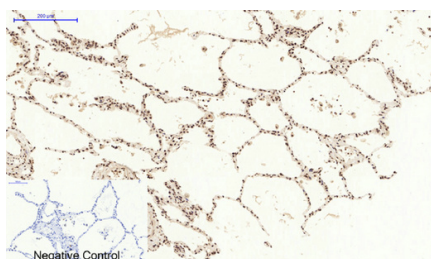
Immunofluorescence analysis of human-uterus tissue. 1, Stat3 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



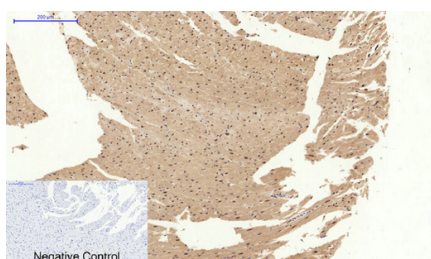
Immunofluorescence analysis of rat-lung tissue. 1, Stat3 Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



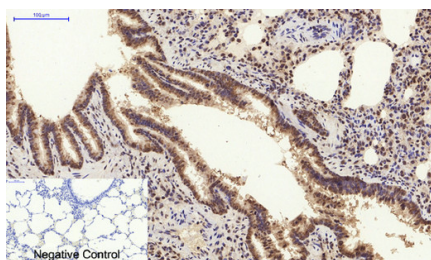
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1, Stat3 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-lung tissue. 1, Stat3 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.

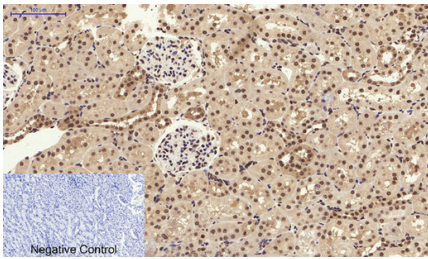


Immunohistochemical analysis of paraffin-embedded Rat-heart tissue. 1, Stat3 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.

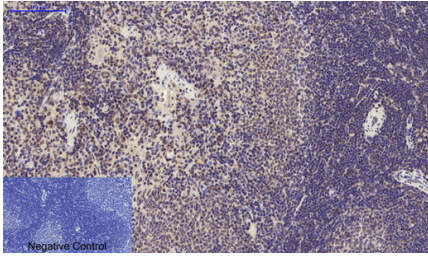


Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1, Stat3 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control was used by secondary antibody only.

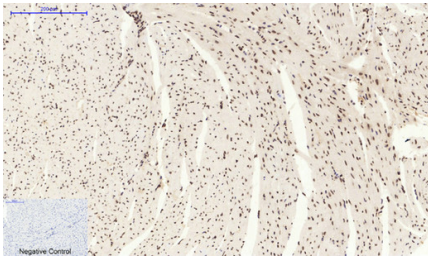
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1, Stat3 Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was



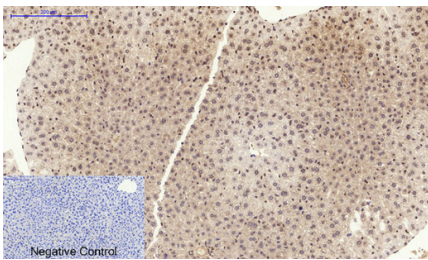
used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



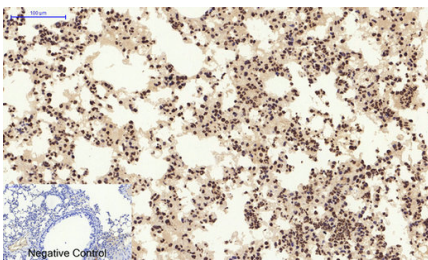
Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1,Stat3 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



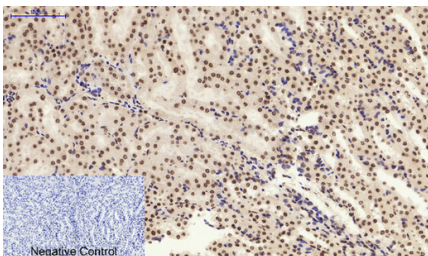
Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. 1,Stat3 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



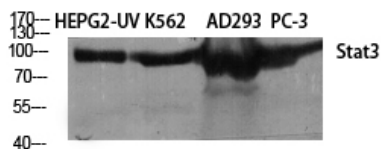
Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1,Stat3 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



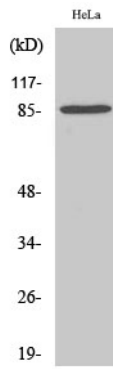
Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1,Stat3 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



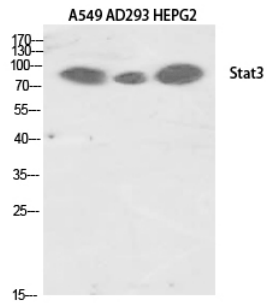
Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,Stat3 Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



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



Western Blot analysis of A549 AD293 HEPG2 using Stat3 Polyclonal Antibody. Antibody was diluted at 1:2000

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.