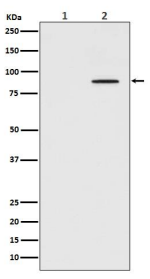
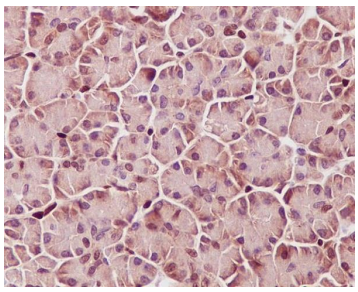
Product Data Sheet:
Phospho-Stat3 (Y705) Rabbit Monoclonal Antibody

Cat. No:	MAB-94616
Conjugate:	Unconjugated
Size:	100 ug
Clone:	EP21472
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human STAT3 around the phosphorylation site of Tyr705. AA range:672-721
Reactivity:	Hu, Ms, Rt
Applications:	Western Blot: 1:1000 Immunohistochemistry: 1:200 Immunocytochemistry: 1:100 Immunofluorescence: 1:100 Immunoprecipitation: 1-2,5ug/mg lysate
Molecular Weight:	88kD
Purification:	Affinity-chromatography
Synonyms:	STAT3; APRF; Signal transducer and activator of transcription 3; Acute-phase response factor
Background:	The protein encoded by this gene 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.
Form:	liquid
Buffer:	RLiquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage:	Store at –20°C. Do not aliquot the antibody.



Western blot analysis of Phospho-STAT3 (Tyr705) expression in (1) HeLa cell lysate; (2) HeLa cell lysate treated with



Immunohistochemical analysis of paraffin-embedded human pancreas, using Phospho-STAT3 (Y705) Antibody

IFN-a. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- STAT3 monoclonal antibody overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for STAT3

STAT3 was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-STAT3 Antibody overnight at 4°C. Biotinylated goat antirabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)with DAB as the chromogen.