

AM00148BT-N**Monoclonal Antibody to STAT3 pTyr705 (incl. pos. control) - Biotin**

Alternate names:	APRF, Acute-phase response factor, STAT-3, Signal transducer and activator of transcription 3
Quantity:	0.1 mg
Concentration:	0.5 mg/ml
Background:	The STAT proteins serve as both cytoplasmic signal transducers and nuclear activators of transcription. STATs are mediators involved in cytokine signalling. In response to a specific cytokine signal, STAT proteins are phosphorylated on conserved tyrosine residues. Phosphorylated STAT proteins dimerize via their SH2 domains and move to the nucleus. The STAT dimers bind to specific DNA elements resulting in transcriptional regulation of downstream target genes. STAT3 is activated by tyrosine phosphorylation at residue Tyr 705 in cells treated with interleukin 6 or EGF. Activated STAT3 can bind to DNA either as homodimer or as heterodimer with STAT1.
Uniprot ID:	P40763
NCBI:	NP_003141.2
GeneID:	6774
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10B (for use in human samples)
Clone:	9E12
Immunogen:	Synthetic phosphopeptide conjugated to KLH
Format:	State: Liquid purified IgG fraction Purification: Size Exclusion Chromatography Buffer System: PBS with 0.09% Sodium Azide, PEG and Sucrose Label: Biotin
Applications:	Western Blot: 0.5 µg/ml for HRPO/ECL detection. <i>Recommended blocking buffer:</i> Casein/Tween 20 based blocking and blot incubation buffer. <i>Included Positive Control:</i> Cell lysate from pervanadate treated HepG2 cells. ELISA: 0.05 µg/ml. Immunoprecipitation: 1-10 µg per 10 ⁶ pervanadate treated HepG2 cells. Immunocytochemistry: 1-10 µg/ml. Immunohistochemistry. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

- Specificity:** This antibody specifically recognizes STAT3 phosphorylated at Tyr 705. The antibody **does not** cross react with the non-phosphorylated form of STAT3 nor with unrelated tyrosine-phosphorylated proteins.
Species: Human, Mouse, Dog.
Other species not tested.
- Storage:** Store the antibody (Aliquote and freeze in liquid nitrogen) at -80°C. Avoid repeated freezing and thawing. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months. Shelf life: one year from despatch.
- Protocols:** **Positive Control Provided: HepG2 pervanadate treated.**
- Description:** Cell lysate from HepG2 cells. Serum starved cells werer treated form15 min with pervanadate.
- Format:** Lyophilized cell lysate from HepG2 cells.
- Reconstitution:** Restore by addition of 200 µl H2O. After complete solubilization add 200 µl 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.
- Storage:** Aliquote and store frozen. Avoid repeated freeze/thaw cycles.
- Application:** The positive control cell lysate is recommended for immunoblot applications. 20 µl of positive control cell lysate correspond to ca. 80.000 cells. Use 20 µl / lane (mini gel) for HRPO/ECL detection of the target proteins.
Please note: The lyophilized cell lysates contain SDS and are not recommended for applications with native proteins such as immunoprecipitation.