

Product datasheet for AM00148PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

STAT3 pTyr705 (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 9E12]

Product data:

Product Type: Primary Antibodies

Clone Name: 9E12

Applications: ELISA, IF, IHC, IP, WB

Recommended Dilution: Western Blot: 0.5 µg/ml for HRPO/ECL detection.

Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer.

ELISA: 0.05 μg/ml.

Immunoprecipitation: 1-10 µg per 106 pervanadate treated HepG2 cells.

Immunocytochemistry: 1-10 µg/ml.

Immunohistochemistry.

Included Positive Control: HepG2 pervanadate treated Cell lysate (See Protocols for more

details).

Reactivity: Canine, Human, Mouse

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Synthetic phosphopeptide conjuagted to KLH.

Epitope: Phosphotyrosine 705 ... A P *p* Y L K...

Specificity: The STAT proteins serve as both cytoplasmic signal transducers and nuclear activators of

transcription. 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.

AM00148PU-N specifically recognizes STAT3 phosphorylated at Tyr 705 in human, mouse and dog. The antibody does not crossreact with the non-phosphorylated form of STAT3 nor with unrelated tyrosine-phosphorylated proteins. AM00148PU-N is particularly suitable for

Western blot and ELISA applications.

Formulation: 1 ml 2 x PBS with 0.09% Sodium Azide, PEG and Sucrose

State: Purified

State: Lyophilized purified IgG fraction

Reconstitution Method: Restore with 1 ml H2O (15 min, RT).

Purification: Size Exclusion Chromatography





STAT3 pTyr705 (incl. pos. control) Mouse Monoclonal Antibody [Clone ID: 9E12] - AM00148PU-N

Conjugation: Unconjugated

Storage: Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 92 kDa

Database Link: Entrez Gene 6774 Human

P40763

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.

Synonyms: STAT-3, Acute-phase response factor, APRF

Note: Protocol: <u>Positive Control Provided</u>: Cell lysate from HepG2 pervanadate treated.

Format: Lyophilized cell lysate from HepG2 cells. Serum starved cells were treated for 15min

with pervanadate.

Reconstitution: Restore by addition of 200 µl H20. 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

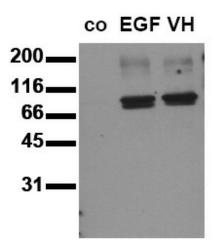
HRPO/ECL detection of the target proteins.

Please note: The lyophilized cell lysates contain SDS and are not recommended for

applications with native proteins such as immunoprecipitation.



Product images:



Phosphospecificity: Whole cell extracts of control (co), EGF stimulated (EGF) or pervanadate treated (VH) HEPG2 tumor cells were applied to SDS-PAGE (ca 20.000 cells per lane) and transferred to a PVDF membrane. The immunoblot was probed with mab STAT3-9E12 (0.5 ug/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec).