Mouse Monoclonal Antibody to

STAT3 (phospho-Ser 727)

clone 23G5

Order No.: **0145-100/STAT3-23G5**

Size (µg) 100

Lot No.: 0145S

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03/080507F

Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1	human, mouse, rat, dog	WB, ELISA, IHC	92 kDa	HepG2	phosphoserine 727 ..L P M pS F R T..	phosphopeptide conjugated to KLH

Background and Specificity:

The STAT proteins serve as both cytoplasmic **s**ignal **t**ransducers and nuclear **a**ctivators of **t**ranscription. 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.
Besides tyrosine phosphorylation, STAT3 activity is regulated by serine phosphorylation at serine 727. Recent reports indicate that both MAP kinase and SAP kinase induce phosphorylaton at serine 727.

Mab STAT3-23G5 specifically recognizes STAT3 phosphorylated at Ser 727. The antibody does not crossreact with the non-phosphorylated form of STAT3 nor with unrelated serine-phosphorylated proteins. Mab STAT3-23G5 is suitable for Western blot and ELISA applications.

Related Products

mab to STAT1 (phospho-Ser 727)
#0176-100/STAT1-12C5
mab to STAT3 (phospho-Tyr 705)
#0036-100/STAT3-9E12
mab to STAT5 A/B (phospho-Tyr 695/699)
#0121-100/STAT5-5G4
mab to STAT6 (phosph-Tyr 641)
#0079-100/STAT6-16E12
mab to STAT6 (aa 630-650)
#0063-100/STAT6-8C12

Purification: The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.

Formulation: lyophilized from 1 ml 2 x PBS / 0.09 % Na-azide / PEG and Sucrose.

Reconstitution: Reconstitute with 1 ml H_2O (15 min, RT).

Stability: For long-term storage, freeze lyophilizate upon arrival (-20°C). Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be stored frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months.

Avoid repeated freeze / thaw cycles.

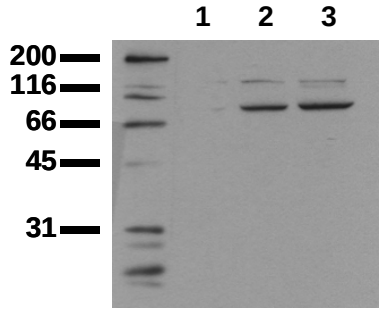
Positive Control: #0812: Cell lysate from pervanadate-treated HepG2 cells

Immunoblotting: 0.5 µg/ml for HRPO/ECL detection
Recommended blocking buffer: Casein/Tween 20 based blocking and blot incubation buffer, e.g. nanoTools product #3031-500/CPPT or #3031-3000/CPPT.

Immunoprecipitation: ND

Immunocytochemistry: ND

ELISA: use at 0.1 µg/ml



Phosphospecificity

Whole cell extracts of control (1), EGF stimulated (2) or pervanadate treated (3) A 431 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 STAT3-23G5 (0.5 µg/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec).

All products are supplied for research and investigational use only. Not for use in humans or laboratory animals.