Product Information Sheet

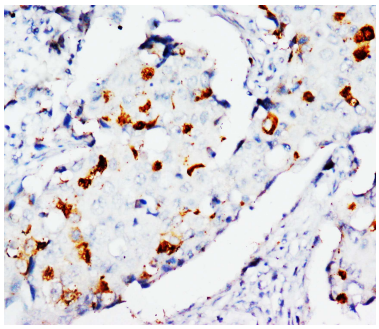
Polyclonal Anti-STAT3

Catalogue No. PA1108

Lot No. 08F01

Ig type: rabbit IgG

Size: 100µg/vial



Specificity

Human, mouse, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunocytochemistry

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human STAT3, identical to the related rat and mouse sequence.

Purity

Immunogen affinity purified.

Application

Western blot

At 1-2µg/ml with the appropriate system to detect STAT3 in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect STAT3 in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

Immunocytochemistry suitable

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg Thimerosal, 0.05mg NaN_3.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage

At -20˚C for one year. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for longer time.

To reorder contact us at:

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BACKGROUND

The transcription factor, signal transducer and activator of transcription-3 (STAT-3) is the most pleiotropic member of the signal transducer and activator of transcription (STAT) family of transcription factors and mediates pivotal responses for the cytokine family. The mouse STAT3 gene contains 24 exons and spans 30 kb. The translation initiation codon is in exon 2, and the stop codon is in exon 24. STAT3 is mapped to 17q21, it contributes to various physiological processes. Hepatic STAT-3 signaling is thus essential for normal glucose homeostasis and may provide new therapeutic targets for diabetes mellitus.

REFERENCE

1. Bhattacharya, S.; Schindler, C. : Regulation of Stat3 nuclear export. *J. Clin. Invest.* 111: 553-559, 2003.
2. Miyoshi, K.; Cui, Y.; Riedlinger, G.; Robinson, P.; Lehoczky, J.; Zon, L.; Oka, T.; Dewar, K.; Hennighausen, L. : Structure of the mouse Stat 3/5 locus: evolution from Drosophila to zebrafish to mouse. *Genomics* 71: 150-155, 2001.
3. Inoue, H.; Ogawa, W.; Ozaki, M.; Haga, S.; Matsumoto, M.; Furukawa, K.; Hashimoto, N.; Kido, Y.; Mori, T.; Sakaue, H.; Teshigawara, K.; Jin, S.; Iguchi, H.; Hiramatsu, R.; LeRoith, D.; Takeda, K.; Akira, S.; Kasuga, M. : Role of STAT-3 in regulation of hepatic gluconeogenic genes and carbohydrate metabolism in vivo. *Nature Med.* 10: 168-174, 2004.