Technical Data Sheet

Purified Mouse Anti-Stat6

Product Information

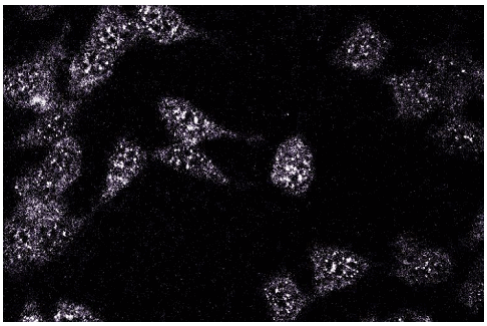
Material Number:	**611291**
Size:	150 µg
Concentration:	250 µg/ml
Clone:	23/Stat6
Immunogen:	Human Stat6 C-terminal Recombinant Protein
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat
Target MW:	100 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

STATs (signal transducers and activators of transcription) are critical mediators of the biologic activity of cytokines including Interleukins (IL) 2-5, IL-7, IL-15, GM-CSF, erythropoietin and growth hormone. Ligand-receptor interaction leads to activation of constitutively associated JAK family kinases and subsequent recruitment/activation of STATs by tyrosine phosphorylation. Active STATs then move to the nucleus to promote transcription of cytokine-inducible genes. Seven STAT proteins have been cloned, each of which is differentially expressed and/or activated in a cytokine-specific and cell type-specific manner. Stat6 plays an important role in signaling pathways that lead to the differentiation of T helper type 2 (Th2) cells from uncommitted CD4 T cell precursors. Moreover, IL-4, secreted by activated T lymphocytes, basophils, and mast cells, induces specific gene expression via the induction of tyrosine phosphorylation of Stat6 at tyrosine 641 (Y641). The SH3:SH2 domain of Stat6 associates with tyrosine-phosphorylated IL-4 receptor and the proximal Jak kinase phosphorylates Stat6 at Y641 on the C-terminal side of the SH2 domain. Stat6 is then released from the receptor, dimerizes, and is thought to contact the basal transcription machinery by binding to p300/CBP. While Stat6 is widely expressed in human tissues, it exhibits elevated expression in peripheral blood lymphocytes, colon, intestine, ovary, prostate, thymus, spleen, kidney, liver, lung, and placenta.

The 23/Stat6 monoclonal antibody recognizes Stat6, regardless of phosphorylation status.

Western blot analysis of Stat6 on jurkat lysate. *Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of Stat6.*



HeLa

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20°C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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