Purified Mouse Anti-human STAT1 Antibody *SM2, monoclonal*

Catalog number: V1032150
Unit size: 0.1 mg

Product Details

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	Lot specific (please consult certificate of analysis for given lot)
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 15 mM sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Immunogen	STAT1
Clone	SM2

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with under optimal conditions
Application	IP, WB

Applications

Signal transducer and activator of transcription 1-alpha/beta is a protein with a molecular weight of 87 kDa, found in the dendrite, perinuclear region of cytoplasm and nucleoplasm of cells. Sequencing of signal transducer and activator of transcription 1-alpha/beta has shown it contains a primary structural unit, the SH2 domain. Signal transducer and activator of transcription 1-alpha/beta plays an important role in DNA-templated transcription, apoptotic process and cell population proliferation. It takes part in organismal processes, in particular, response to peptide hormone, response to cytokine and viral process. Signal transducer and activator of transcription 1-alpha/beta has been thought to be involved with vital functions like protein homodimerization and DNA-binding transcription factor activity. It is the subject of extensive study because of the fact that it acts in the receptor signaling pathway via JAK-STAT, interleukin-9-mediated signaling pathway and tumor necrosis factor-mediated signaling pathway. Signal transducer and activator of transcription 1-alpha/beta upregulates transcription of Notch receptor target, mesenchymal cell proliferation and interferon-α production, conversely, also represses metanephric nephron tubule epithelial cell differentiation, mesenchymal to epithelial transition involved in metanephros morphogenesis and I-kappaB kinase/NF-kappaB signaling. Mutations and abnormalities in signal transducer and activator of transcription 1-alpha/beta have been closely linked to a number of diseases, for instance, immunodeficiency 31A (IMD31A), immunodeficiency 31B (IMD31B) and immunodeficiency 31C (IMD31C). Immunodeficiency 31C, an autosomal dominant inheritancedisorder characterized by immunodeficiency, diabetes mellitus and osteopenia, has especially been of interest to researchers.