



# STAT1 mouse Monoclonal Antibody(8H11)

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-01169                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Reactivity</b>                  | Human;Rat;Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications</b>                | IHC;IF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Gene Name</b>                   | STAT1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen</b>                   | Synthetic Peptide of STAT1 at AA range of 640-720                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Specificity</b>                 | STAT1 protein detects endogenous levels of STAT1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>                      | Monoclonal, Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purification</b>                | The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Dilution</b>                    | IHC 1:100-200. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Synonyms</b>                    | ISGF 3;Signal transducer and activator of transcription 1-alpha/beta;STAT91; Transcription factor ISGF-3 components p91/p84;Stat1                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Observed Band</b>               | 84,91kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Calculated Molecular Weight</b> | 84,91kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Cell Pathway</b>                | Cytoplasm . Nucleus . Translocated into the nucleus upon tyrosine phosphorylation and dimerization, in response to IFN-gamma and signaling by activated FGFR1, FGFR2, FGFR3 or FGFR4 (PubMed:15322115). Monomethylation at Lys-525 is required for phosphorylation at Tyr-701 and translocation into the nucleus (PubMed:28753426). Translocates into the nucleus in response to interferon-beta stimulation (PubMed:26479788). .                                                                                                 |
| <b>Tissue Specificity</b>          | B-cell,Brain,Retina,Testis,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Function</b>                    | disease:Defects in STAT1 are a cause of mendelian susceptibility to mycobacterial disease (MSMD) [MIM:209950]; also known as familial disseminated atypical mycobacterial infection. This rare condition confers predisposition to illness caused by moderately virulent mycobacterial species, such as Bacillus Calmette-Guerin (BCG) vaccine and environmental non-tuberculous mycobacteria, and by the more virulent Mycobacterium tuberculosis. Other microorganisms rarely cause severe clinical disease in individuals with |



susceptibility to mycobacterial infections, with the exception of Salmonella which infects less than 50% of these individuals. The pathogenic mechanism underlying MSMD is the impairment of interferon-gamma mediated immunity whose severity determines the clinical outcome. Some patients die of overwhelming mycobacterial disease with lepromatous-like lesions in early childhood, whereas

#### Background

The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. This protein can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. Two alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2008],

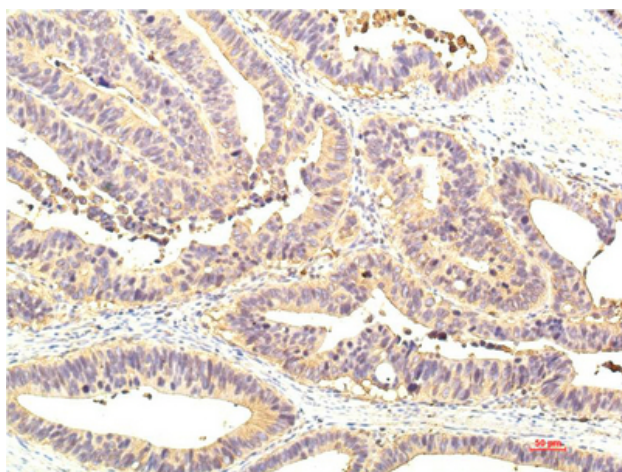
#### matters needing attention

Avoid repeated freezing and thawing!

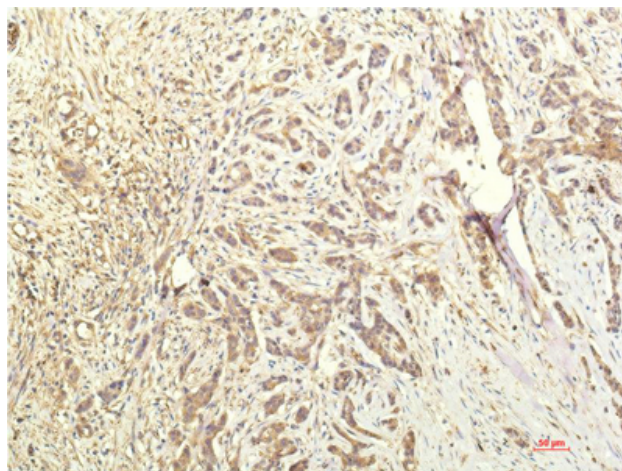
#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Immunohistochemical analysis of paraffin-embedded Human Colon Tissue using STAT1 Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma Tissue using STAT1 Mouse mAb diluted at 1:200