

# Immunotag™ Stat2 Polyclonal Antibody

| Antibody Specification |                                                                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog No.            | ITM3416                                                                                                                                                            |
| Product Description    | Immunotag™ Stat2 Polyclonal Antibody                                                                                                                               |
| Size                   | 50 µg, 100 µg                                                                                                                                                      |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | STAT2                                                                                                                                                              |
| Clonality              | Polyclonal                                                                                                                                                         |
| Storage/Stability      | -20°C/1 year                                                                                                                                                       |
| Application            | WB,IHC-p                                                                                                                                                           |
| Recommended Dilution   | Western Blot: 1/500 - 1/2000.IHC-p:1:50-300. Not yet tested in other applications.                                                                                 |
| Concentration          | 1 mg/ml                                                                                                                                                            |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                    |
| Host Species           | Rabbit                                                                                                                                                             |
| Immunogen              | Synthesized peptide derived from human Stat2 around the non-phosphorylation site of Y631.                                                                          |
| Specificity            | The antibody detects endogenous Stat2 protein.                                                                                                                     |
| Purification           | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen                                               |
| Form                   | PBS, pH 7.4, containing 0.02% sodium azide as Preservative and 50% Glycerol.                                                                                       |
| Gene Name              | STAT2                                                                                                                                                              |
| Accession No.          | P52630 Q9WVL2                                                                                                                                                      |
| Alternate Names        | STAT2; Signal transducer and activator of transcription 2; p113                                                                                                    |

## Antibody Specification

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| Description                 | signal transducer and activator of transcription 2(STAT2) Homo sapiens 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. In response to interferon (IFN), this protein forms a complex with STAT1 and IFN regulatory factor family protein p48 (ISGF3G), in which this protein acts as a transactivator, but lacks the ability to bind DNA directly. Transcription adaptor P300/CBP (EP300/CREBBP) has been shown to interact specifically with this protein, which is thought to be involved in the process of blocking IFN-alpha response by adenovirus. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2010],                                                                                                                               |
| Cell Pathway/<br>Category   | Chemokine,Jak_STAT,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Protein<br>Expression       | Human small intestine,Lung,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Subcellular<br>Localization | nucleus,nucleoplasm,cytoplasm,cytosol,plasma membrane,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Protein Function            | function:Signal transducer and activator of transcription that mediates signaling by type I IFNs (IFN-alpha and IFN-beta). Following type I IFN binding to cell surface receptors, Jak kinases (TYK2 and JAK1) are activated, leading to tyrosine phosphorylation of STAT1 and STAT2. The phosphorylated STATs dimerize, associate with ISGF3G/IRF-9 to form a complex termed ISGF3 transcription factor, that enters the nucleus. ISGF3 binds to the IFN stimulated response element (ISRE) to activate the transcription of interferon stimulated genes, which drive the cell in an antiviral state.,PTM:Tyrosine phosphorylated in response to IFN-alpha.,similarity:Belongs to the transcription factor STAT family.,similarity:Contains 1 SH2 domain.,subcellular location:Translocated into the nucleus upon activation by IFN-alpha/beta.,subunit:Interacts with ISGF3G/IRF-9 in the cytoplasm. Heterodimer with STAT1 upon IFN-alpha/beta induced phosphorylation. Interacts with CRSP2 and CRSP6. Interacts with Simian virus 5 protein V and rabies virus phosphoprotein., |
| Usage                       | For Research Use Only! Not for diagnostic or therapeutic procedures.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |