



Monoclonal Anti-human STAT2 Antibody

ORDERING INFORMATION

Catalog Number: MAB16661

Clone: 545103

Lot Number: CDBJ01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS
with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human STAT2

Immunogen: *E. coli*-derived rhSTAT2

Ig class: mouse IgG_{2b}

Recommended Application:
Immunohistochemistry

Other Application:
Direct ELISA

Background

Signal transducer and activator of transcription 2 (STAT2) is a 98 kDa member of the transcription factor STAT family. Human STAT2 is 851 amino acids (aa) in length and contains one SH2 domain (aa 572 - 667). Splicing variants produce two isoforms for human STAT2. The short isoform has substitutions corresponding to aa 621 - 652 and aa 653 - 851 in the long isoform, respectively. Human STAT2 shares 73% and 65% aa sequence identity with rat and mouse STAT2, in that order. STAT2 functions as a signal transducer and activator of transcription that mediates signaling by type I IFNs (IFN- α and IFN- β).

Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, *E. coli*-derived, recombinant human STAT2 (rhSTAT2; aa 679 - 851; Accession # P52630). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody detects rhSTAT2 in direct ELISAs. In this format, this antibody shows no cross-reactivity with rhSTAT1, 1A, 3, 4, 5A, 5B, 6, or rmSTAT2.

Applications

Immunohistochemistry - This antibody was used at a concentration of 25 µg/mL with appropriate secondary reagents to detect STAT2 in paraffin-embedded normal human liver tissue sections. For chromogenic detection of labeling, the use of R&D Systems Cell and Tissue Staining Kits (CTS Series) is recommended.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human STAT2. The detection limit for rhSTAT2 is approximately 2 ng/well.

For immunohistochemistry images, please refer to our website at
<http://www.RnDSystems.com/go/ihc>.

Optimal dilutions should be determined by each laboratory for each application.