

Anti-STAT1 (RABBIT) Antibody Stat1 Antibody Catalog # ASR5412

### **Specification**

# Anti-STAT1 (RABBIT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Mouse Rat, Mouse Polyclonal WB, E, I, LCI This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 91 kDa in size corresponding to Stat1 protein by western blotting in the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to residues near the carboxy terminus of mouse Stat1 protein.
Preservative	0.01% (w/v) Sodium Azide

#### Anti-STAT1 (RABBIT) Antibody - Additional Information

Other Names 20846

#### **Purity**

This product was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody is specific for mouse Stat1 protein. A BLAST analysis was used to suggest cross-reactivity with Stat1 from mouse and rat based on 100% homology with the immunizing sequence. Partial reactivity is expected against Stat1 from human sources as 90% homology is noted. Cross-reactivity with Stat1 from other sources has not been determined.

#### Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Precautions Note** 



This product is for research use only and is not intended for therapeutic or diagnostic applications.

# Anti-STAT1 (RABBIT) Antibody - Protein Information

# Anti-STAT1 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### Anti-STAT1 (RABBIT) Antibody - Images

# Anti-STAT1 (RABBIT) Antibody - Background

This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Signal transducer and activator of transcription 1 (Stat1) belongs to a family of cytoplasmic transcription factors that can be activated (phosphorylated) by a cell surface receptor. Phosphorylation of Stat1 at Tyr701 induces Stat1 dimerization, nuclear translocation and DNA binding. Stat1 has two isoforms, Stat1a (91 kDa) and the splice variant Stat1b (84 kDa). Stat1 has been found to be inappropriately activated in many tumors. In addition to tyrosine phosphorylation, Stat1 is phosphorylated through a p38 mitogen-activated protein kinase (MAPK)-dependent pathway at Ser727 in response to IFN-g and other cellular stresses. Stat1 is localized in the cytoplasm and upon phosphorylation at Y701 is translocated to the nucleus.