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Stat2 Antibody

Store at -20C
#4594

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 113	Source/Isotype: Rabbit	UniProt ID: #P52630	Entrez-Gene Id: 6773
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Stat2 Antibody detects endogenous levels of total Stat2 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxyl terminus of human Stat2. Antibodies were purified by protein A and peptide affinity chromatography.

Background

Stat2 (113 kDa), originally purified from the nuclei of alpha-interferon-treated cells, is critical to the transcriptional responses induced by type I interferons, IFN-alpha/beta (1,2). Knockout mice with a targeted disruption of Stat2 have higher susceptibility to viral infection and altered responses to type I interferons (3). Stat2 is rapidly activated by phosphorylation at Tyr690 in response to stimulation by IFN-alpha/beta via associations with receptor-bound Jak kinases (4). Unlike other Stat proteins, Stat2 does not form homodimers. Instead, activated Stat2 forms a heterodimer with Stat1 and translocates to the nucleus. There, it associates with the DNA-binding protein p48 and forms the transcriptional activator complex, interferon-stimulated gene factor 3 (ISGF3), promoting transcription from the ISRE (5).

Background References

1. Fu, X.Y. et al. (1992) *Proc Natl Acad Sci U S A* 89, 7840-3.
2. Ihle, J.N. (2001) *Curr Opin Cell Biol* 13, 211-7.
3. Park, C. et al. (2000) *Immunity* 13, 795-804.
4. Improta, T. et al. (1994) *Proc Natl Acad Sci U S A* 91, 4776-80.
5. Horvath, C.M. et al. (1996) *Mol Cell Biol* 16, 6957-64.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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