

TECHNICAL DATASHEET

STAT2 monoclonal antibody - Classic

Cat. No. C15200210
Type: Monoclonal
Source: Mouse
Lot #: 001

Concentration: 1.0 µg/µl

Specificity: Human, mouse **Purity:** Protein A purified

Storage: Store at -20°C; for long storage, store at -80°C.

Avoid multiple freeze-thaw cycles.

Precautions: This product is for research use only. Not for

use in diagnostic or therapeutic procedures.

Applications

Size: 100 μg

	Suggested dilution*	Results
ELISA	1:5,000 - 1:10,000	
Western blot	1:1,000	Figure 1
Immunohistochemistry	1:2.5 μg/mL	Figure 2

^{*}Optimal dilutions/concentrations should be determined by the researcher.

Target description

STAT2 is a member of the STAT family of transcription factors. Unlike other STATs, STAT2 is unique as it can only be activated by interferons (IFNs). STAT2 is a critical component in mediating many IFN-stimulated biological activities including antiproliferation and antiviral responses. Upon IFN treatment, STAT1 and STAT2 become tyrosine phosphorylated, assemble as heterodimers that bind IRF9 to form the ISGF3 complex. This complex translocates to the nucleus, binds to promoters of IFN-stimulated genes and mediates gene transcription. Consequently, mutations in STAT2 or loss of STAT2 expression leads to impairment in IFN signal transduction and gene activation.



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Results

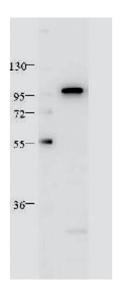


Figure 1. STAT2 western blot results

Western blot was performed on 1 μ g HeLa whole cell lysate with the STAT2 monoclonal antibody [Cat. No. C15200210]. The blot was blocked with 1% BSA in TBST for 30 min at RT, then washed and incubated with the Diagenode STAT2 antibody diluted 1:1,000 in 3% BSA/TBST overnight at 4C.

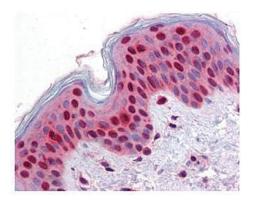


Figure 2. STAT2 antibody immunohistochemistry results

The Diagenode STAT2 monoclonal antibody was used at a 2.5 μ g/mL to detect STAT2 in squamous epithelium from human skin (40X) showing moderate to strong nuclear and faint to moderate cytoplasmic staining (figure 2). Expression of STAT2 is expected to be cytoplasmic, and nuclear upon activation. The image shows the localization of the antibody as the precipitated red signal, with a hematoxylin purple nuclear counterstain. Tissue was formalin-fixed and paraffin embedded.

Last update: September 10, 2014