bs-13664R **[Primary Antibody]**

SOCS5 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 9655 **SWISS:** O75159

Target: SOCS5

Immunogen: KLH conjugated synthetic peptide derived from human SOCS5: 151-250/539.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: The eight members of the recently identified Suppressor of Cytokines Signaling (SOCS) family are SOCS1, SOCS2, SOCS3, SOCS4, SOCS5, SOCS6, SOCS7, and CIS. Structurally the SOCS proteins are composed of an N- terminal region of variable length and amino acid composition, a central SH2 domain, and a C-terminal motif called the SOCS box. The SOCS proteins appear to form part of a classical negative feedback loop that regulates cytokine signal transduction. Transcription of each of the SOCS genes occurs rapidly in vitro and in vivo in response to cytokines, and once produced, the various members of the SOCS family appear to inhibit signaling in different ways. During Th1 differentiation a reduction in the association of Jak1 with the IL4 Receptor correlated with the appearance of SOCS5. SOCS5 protein was preferentially expressed in committed Th1 cells and interacted with the cytoplasmic region of the IL4 Receptor alpha chain irrespective of receptor tyrosine phosphorylation. This unconventional interaction of SOCS5 protein with IL4 Receptor resulted in the inhibition of IL4-mediated signal transducer and activator of transcription-6 activation. T cells from transgenic mice constitutively expressing SOCS5 exhibited a significant reduction of IL4-mediated Th2 development. Therefore, the induced SOCS5 protein in Th1 differentiation environment may play an important role by regulating Th1 and Th2 balance.

Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
ICC/IF (1:100-500)
ELISA (1:5000-10000)

Reactivity: (predicted: Human, Mouse, Rat, Sheep, Cow, Chicken)

Predicted MW.: 61 kDa

Subcellular Location: Cytoplasm ,Nucleus

SELECTED CITATIONS

- **[IF=10.6]** Zhang Yeshen. et al. Neutrophil N1 polarization induced by cardiomyocyte-derived extracellular vesicle miR-9-5p aggravates myocardial ischemia/reperfusion injury. J NANOBIOTECHNOL. 2024 Dec;22(1):1-25 WB ;Mouse. 39415256
- **[IF=7.666]** Monika Bednarczyk. et al. β2 Integrins on Dendritic Cells Modulate Cytokine Signaling and Inflammation-Associated Gene Expression, and Are Required for Induction of Autoimmune Encephalomyelitis. CELLS-BASEL. 2022 Jan;11(14):2188 IF ;Mouse. 35883631