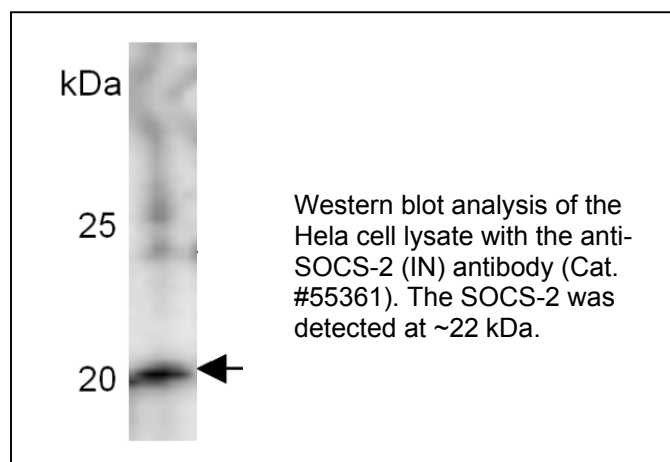




Product Data Sheet

Product Name:	Anti-SOCS-2 (IN) (Suppressor of cytokine signaling 2)
Catalog Number:	55361
Lot Number:	See label on vial
Product Description:	This rabbit polyclonal antibody is supplied as an epitope-affinity purified rabbit IgG 50 µg in 250 µl (0.2 mg/ml) of 1x PBS (pH 7.4) containing 0.05% sodium azide.
Immunogen:	A synthetic peptide derived from the intermediate region of human SOCS-2 (Genbank accession # NP_003868).
Species Reactivity:	The species reactivity includes human, rat, and mouse. The reactivity of anti-SOCS-2 (IN) was confirmed by ELISA and dot blot. The specificity was confirmed by western blot analysis of HeLa cell lysate.
Application Notes:	The following concentration ranges are recommended starting points for this product. The investigator should determine the optimal working concentrations for specific applications. ELISA for immunizing peptide: 1: 5,000-20,000 Western Blot: 1: 500-1,000



Background:

Suppressors of cytokine signaling (SOCS) protein family includes eight members in humans: SOCS-1 through SOCS-7 and cytokine-inducible Src-homology 2 (SH2) containing protein (CIS) (1-4). All members of the family have similar structure: variable length (50-380 aa) and amino acid sequence N-terminal region, SH2 domain in the center, and homologous amino acid long sequence at the C-terminus that was named SOCS box (1-5). Studies have demonstrated that animals lacking normal SOCS function exhibit high cytokine activity that leads to a variety of inflammatory and autoimmune diseases and even cancer (3). SOCS-2 is 198 amino acids long with short N-terminus and shares sequence similarity with CIS (1-2). SOCS-2 mRNA normally presents at very low levels in different tissues; however, its level is rapidly increased upon stimulation with IL-1, IL-3, IL-4, IL-6, LIF, GM-CSF, G-CSF, EPO, IFN γ , prolactin, and GH (4). Similar to CIS, SOCS-2 does not bind to Janus-activated kinases; however, it can associate with GH, IGF-1, prolactin and leptin receptors (1-6). For example, SOCS-2 binds to Y1077 motif of leptin receptor and thus acts as a negative regulator of STAT5 (5).

References:

1. Hilton D. J. et al. (1998) Biochemistry 195: 114-119
2. Krebs D. et al. (2001) Stem Cells 19: 378-387
3. Bullock A. N. et al. (2007) Structure 15 (11): 1493-1504
4. Cooney R.N. (2002) Shock 17(2): 83-90
5. Lavens D. (2006) J. of Cell Sc. 119: 2214-2224
6. Goldshmit Y. et al. (2004) J. of Biol. Chem. 279(16):16349-16355

Storage:

Store at 2-8 °C for up to 12 months. Avoid repeated freezing and thawing.

Related Products:

[Check](#) our website for more anti-SOCS antibodies.

Compatible Secondary Antibodies:

Catalog #	Goat anti-Rabbit IgG (H+L)
28176	Unconjugated
28176-AMCA	AMCA Labeled
28176-FAM	FAM Labeled
28176-FITC	FITC Labeled
28176-TAMRA	TAMRA Labeled
28176-H488	HiLyte Fluor™ 488 Labeled
28176-H555	HiLyte Fluor™ 555 Labeled
28176-H594	HiLyte Fluor™ 594 Labeled
28176-H647	HiLyte Fluor™ 647 Labeled
28176-H680	HiLyte Fluor™ 680 Labeled
28176-H750	HiLyte Fluor™ 750 Labeled
61056-H488	Highly Cross-adsorbed, HiLyte Fluor™ 488 Labeled
61056-H555	Highly Cross-adsorbed, HiLyte Fluor™ 555 Labeled
61056-H594	Highly Cross-adsorbed, HiLyte Fluor™ 594 Labeled
61056-H647	Highly Cross-adsorbed, HiLyte Fluor™ 647 Labeled
61056-H680	Highly Cross-adsorbed, HiLyte Fluor™ 680 Labeled
61056-H750	Highly Cross-adsorbed, HiLyte Fluor™ 750 Labeled
28177	Highly Cross-adsorbed, HRP Labeled
28178	Highly Cross-adsorbed, AP Labeled
28179	Highly Cross-adsorbed, Biotin Labeled

This product is for *in vitro* research use only.