

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects endogenous human SPRY4 in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human SPRY4 Met1-His178 Accession # NP_112226
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

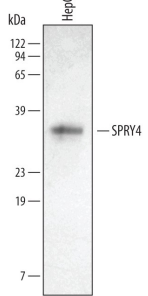
**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below
<b>Simple Western</b>	10 µg/mL	See Below

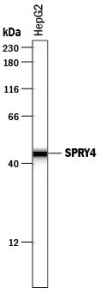
**DATA**

**Western Blot**




**Detection of Human SPRY4 by Western Blot.** Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Human SPRY4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5070) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for SPRY4 at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Simple Western**



**Detection of Human SPRY4 by Simple Western™.** Simple Western lane view shows lysates of HepG2 human hepatocellular carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for SPRY4 at approximately 45 kDa (as indicated) using 10 µg/mL of Sheep Anti-Human SPRY4 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5070) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

SPRY4 (sprouty 4) is a member of the sprouty family of proteins. It blocks tyrosine kinase growth factor activation of the MAPK signaling pathway, possibly through an interaction with either Raf1 or TESK1. Human SPRY4 is 322 amino acids (aa) in length. It contains three SH3-binding domains (aa 3-9; 25-31; 168-174), an NLS (aa 87-93), a PEST sequence (aa 118-133), and a Cys-rich/Zn<sup>2+</sup>-finger domain that binds both TESK1 and Raf1 (aa 182-298). There are two variant isoforms. One is a short form that shows an alternate start site at Met24, while a second shows a 10 aa substitution for aa 120-129, followed by a premature truncation. Over aa 1-177, human SPRY4 is 89% aa identical to canine SPRY4. Mouse SPRY4 is orthologous to the human short form, and shares 90% aa identity with human SPRY4.