

**DESCRIPTION**

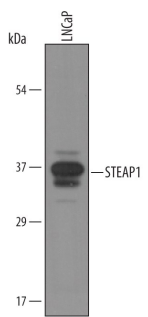
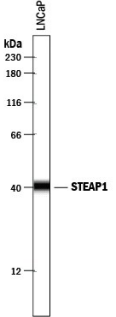
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human STEAP1 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human STEAP1 Met1-His72 Accession # Q9UHE8
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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**

<p><b>Western Blot</b></p>  <p><b>Detection of Human STEAP1 by Western Blot.</b> Western blot shows lysates of LNCaP human prostate cancer cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human STEAP1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5587) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for STEAP1 at approximately 37 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p><b>Simple Western</b></p>  <p><b>Detection of Human STEAP1 by Simple Western™.</b> Simple Western lane view shows lysates of LNCaP human prostate cancer cell line, loaded at 0.2 mg/mL. A specific band was detected for STEAP1 at approximately 40 kDa (as indicated) using 10 µg/mL of Goat Anti-Human STEAP1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5587) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p>
---	--

**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**

STEAP1 (six-transmembrane epithelial antigen of the prostate-1) is a 40 kDa protein (predicted) of the STEAP family of metalloredutases. It is expressed mainly at cell-cell junctions between prostate secretory epithelium, and up-regulated in prostate and some bladder, colon and ovarian cancers and Ewing's sarcomas. Human STEAP1 is 339 amino acids (aa) in length. It contains a ferric oxidoreductase domain (aa 119-265) that includes transmembrane sequences (# 2, 3, 4, and part of 5, out of 6 sequences). Two splice forms diverge at aa 255, terminating after aa 58 or 259. Over aa 1-71, human and mouse STEAP1 share 68% aa identity.