

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human SUZ12 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human SUZ12 Thr131-Asn305 Accession # Q15022
<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>	0.1 µg/mL	HeLa human cervical epithelial carcinoma cell line
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunoprecipitation</b>	4 µg/mL	See Below

#### DATA

<p><b>Immunoprecipitation</b></p>	<p><b>Immunoprecipitation of Human SUZ12.</b> SUZ12 was immunoprecipitated from 400 µg of HeLa human cervical epithelial carcinoma cell line lysates using 4 µg of Sheep Anti-Human SUZ12 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4184) coated on 4 wells of a 96 well plate (Corning Costar EIA/RIA). HeLa lysates or control buffer were added to the wells and incubated for 2 hours at room temperature. Immunoprecipitated SUZ12 was detected by Western blot under reducing conditions using 0.1 µg/mL Sheep Anti-Human SUZ12 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4184) and Immunoblot Buffer Group 1. View our <a href="#">recommended buffer recipes for Immunoprecipitation</a>.</p>	<p><b>Immunocytochemistry</b></p> <p><b>SUZ12 in HeLa Human Cervical Epithelial Carcinoma Cell Line.</b> SUZ12 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Sheep Anti-Human SUZ12 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4184) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI(blue). Specific staining was localized to nucleus and cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>
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#### 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

SUZ12 (suppressor of zeste 12; also know as Joined to JazF1) is a 90-100 kDa member of the Polycomb group of transcriptional regulators. It is part of a transcription repression complex termed PRC2 (Polycomb repressive complex 2) that methylates histones in the nucleus, resulting in homeotic (pattern-inducing) gene silencing. Human SUZ12 is 739 amino acids (aa) in length. It contains one C2H2-type zinc finger region (aa 44-8471) and a C-terminal VEFS-box (aa 563-639). There is one potential splice form that shows a deletion of 51 aa over aa 129-197. Human SUZ12 shares 90% and 99% aa identity with mouse and canine SUZ12, respectively.