

**DESCRIPTION**

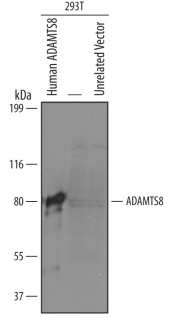
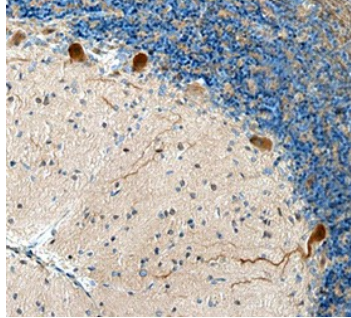
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ADAMTS8 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) ADAMTS1 is observed and less than 1% cross-reactivity with rhADAMTS1, rhADAMTS3, rhADAMTS4, rhADAMTS5, rhADAMTS10, rhADAMTS12, rhADAMTS13, and rhADAMTS16 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human ADAMTS8 Pro29-Arg691 (Gly35Arg, Gly431Ala, Val526Ala) Accession # AAD48081
<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>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human ADAMTS8, see our available <a href="#">Western blot detection antibodies</a>

**DATA**

<p><b>Western Blot</b></p>  <p><b>Detection of Human ADAMTS8 by Western Blot.</b> Western blot shows lysates of 293T human embryonic kidney cell line either transfected with human ADAMTS8, mock transfected (-), or transfected with an unrelated vector. PVDF Membrane was probed with 1 µg/mL of Human ADAMTS8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6614) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for ADAMTS8 at approximately 80-85 kDa (as indicated). This experiment was conducted under reducing conditions and using <a href="#">Immunoblot Buffer Group 8</a>.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>ADAMTS8 in Human Brain.</b> ADAMTS8 was detected in immersion fixed paraffin-embedded sections of human brain (cerebellum) using Sheep Anti-Human ADAMTS8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6614) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to Purkinje neurons. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<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**

ADAMTS8 (A disintegrin and metalloprotease with thrombospondin motifs 8; also METH-2) is a 95 kDa member of an ADAMTS subfamily of Zn metalloproteases that includes ADAMTS1, -4, -5 and -15. It is expressed by chondrocytes, neurons, astrocytes and macrophages, and likely participates in proteoglycan (aggrecan) proteolysis. Human proADAMTS8 is a secreted, 863 amino acid (aa) glycoprotein. It is highly modular and contains a proregion (aa 27-213), a peptidase M12B domain (aa 219-429), a disintegrin region (aa 438-525), and two TSP type I sequences (aa 526-888) that are separated by an intervening spacer domain (aa 690-831). Cleavage of the proregion generates a mature 80 kDa molecule that may undergo additional processing to create a 65-67 kDa truncated form. There are two potential splice variants. One shows a 31 aa substitution for aa 411-889, while another shows an alternative start site at Met231. Over aa 29-691, human ADAMTS8 shares 79% aa identity with mouse ADAMTS8.