

**DESCRIPTION**

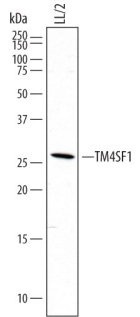
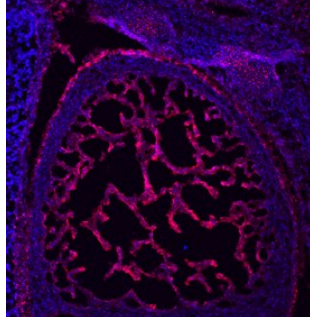
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse TM4SF1 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse TM4SF1 Ala116-Thr161 Accession # Q64302
<b>Formulation</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>Immunohistochemistry</b>	5-15 µg/mL	See Below

**DATA**

<p><b>Western Blot</b></p>  <p><b>Detection of Mouse TM4SF1 by Western Blot.</b> Western blot shows lysates of LL/2 mouse Lewis lung carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Mouse TM4SF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7514) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for TM4SF1 at approximately 26 kDa (as indicated). This experiment was conducted under reducing conditions and using <i>Immunoblot Buffer Group 1</i>.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>TM4SF1 in Mouse Embryo.</b> TM4SF1 was detected in immersion fixed frozen sections of mouse embryo (13 d.p.c.) using Sheep Anti-Mouse TM4SF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7514) at 10 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to the trabeculae of the developing heart. View our protocol for <a href="#">Fluorescent IHC Staining of Frozen 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**

TM4SF1 (Transmembrane 4 L6 family Member 1; also L6 and M3s1) is a 23-28 kDa member of the L6 tetraspanin family of molecules. It is expressed by fibroblasts, endothelial cells and a variety of tumor cells. TM4SF1 is embedded in both the plasma membrane and the membrane of late endocytic organelles. Here, it appears to be ubiquitinated, and to regulate endocytosis, an action that impacts effective cell migration. TM4SF1 is reported to interact with α5 and β1 integrins, and this may impact cell motility. It also suppresses the expression of CD63 and CD82, two molecules that impede cell mobility. Mouse TM4SF1 is a 202 amino acid (aa) 4-transmembrane (TM) glycoprotein. It contains a short N-terminal cytoplasmic region (aa 1-9), followed by four TM regions and another C-terminal cytoplasmic region (aa 183-202). There is one potential isoform variant that shows an alternative start site at Met60. Over aa 116-161, mouse TM4SF1 shares 73% and 96% aa sequence identity with human and rat TM4SF1, respectively.