

**DESCRIPTION**

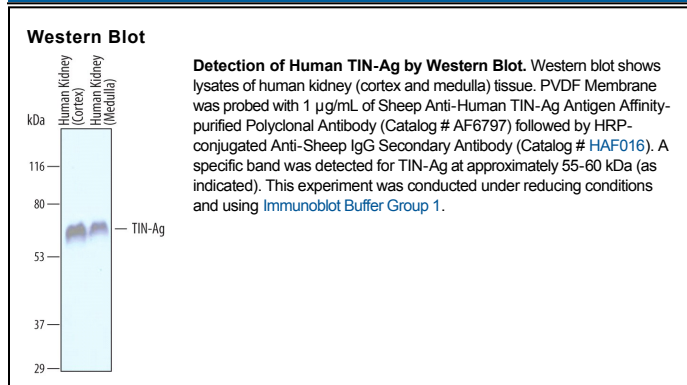
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TIN-Ag in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human TINAGL1 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human TIN-Ag Glu20-Pro476 Accession # Q6NSC1
<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

**DATA**



**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**

TIN-Ag (Tubulointerstitial nephritis antigen) is a 48-58 kDa glycoprotein member of the peptidase C1 family of molecules. It is secreted by renal tubule epithelium and (presumably) small intestine columnar epithelium. TIN-Ag is an integral component of the renal tubule basement membrane (BM), and appears to promote proper BM matrix organization, block laminin polymerization, and serve as a receptor for the epithelial integrins α3β1 and αvβ3. Epithelial dissociation from the BM is associated with an epithelial-to-mesenchymal transition. Human TIN-Ag is synthesized as a 476 amino acid (aa) preproprecursor. It contains a 19 aa signal sequence, a 30 aa furin-cleavable prosegment (aa 20-49), and a 427 aa mature region (aa 50-476). Within the mature region is an SMB domain (aa 61-106), one vWFC domain (aa 119-154), and a nonenzymatic peptidase C1A region (aa 218-466). Multiple splice variants are possible, and potential isoforms may show an alternative start site at Met322, or a combined deletion of aa 119-169 plus 209-300, or a combination of an alternative start site at Met119 coupled to a 13 aa substitution for aa 209-476. Over aa 20-476, human proTIN-Ag shares 86% aa identity with mouse proTIN-Ag; over the mature region (aa 50-476), human TIN-Ag shares 89% aa identity with mouse TIN-Ag.