

## 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>Conjugate</b>	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## 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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## 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  $\alpha 3 \beta 1$  and  $\alpha v \beta 3$ . 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 Met19 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.

## PRODUCT SPECIFIC NOTICES

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