

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TIN-Ag in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human TINAGL1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human TIN-Ag Glu20-Pro476 Accession # Q6NSC1
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	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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