

Product datasheet for **TA389223**

TLN1 Mouse Antibody [Clone ID: 8D4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	8D4
Applications:	ICC, IP, WB
Recommended Dilution:	WB: 1:1000 ICC: 1:100
Reactivity:	Human, Rat, Mouse, Chicken, Xenopus
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone 8D4 was generated from purified chicken gizzard talin. The antibody recognizes an epitope within the rod domain of talin from many species, including human, rat, mouse, chicken, and frog.
Specificity:	The antibody detects a 240 kDa* protein corresponding to the molecular mass of Talin on SDS-PAGE immunoblots of human A431, rat PC12, and rabbit fibroblast cells.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN ₃ and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	240
Database Link:	Q9Y490



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Background:

Talin is an important cytoskeletal component of integrin adhesion sites. Calpains cleave talin precursor (240 kDa) into an amino-terminal globular head domain of 47 kDa and a carboxyl-terminal 190 kDa rod domain. The talin head domain contains a FERM domain that binds integrins, PIP kinase (Type I), and FAK. The rod domain has several vinculin-binding sites, a second integrin-binding site, and two actin-binding sites. These talin protein-protein interactions are critical for integrin activation, focal adhesion formation, and cell migration. Talin regulation may occur through phosphorylation and regulated degradation. The talin head domain binds Smurf1, an E3 ubiquitin ligase, and this interaction leads to talin head ubiquitylation and degradation. Cdk5 can phosphorylate Ser-425 in the head domain, and this inhibits both binding to Smurf1 and subsequent degradation. The S425A talin mutant resists Cdk5 phosphorylation, increases susceptibility to Smurf1-mediated ubiquitylation, and inhibits cell migration. Thus, talin head phosphorylation may be important for regulating adhesion stability and cell migration

Note:

Protein G purified tissue culture supernatant.