TNC Protein, Human (His)

Cat. No.:	HY-P71691
Synonyms:	Cytotactin; Glioma associated extracellular matrix antigen; GMEM; TenascinC
Species:	Human
Source:	E. coli
Accession:	P24821 (D1888-A2201)
Gene ID:	3371
Molecular Weight:	Approximately 36-39.5 kDa

PROPERTIES

AA Sequence	D S P R D L T A T E V Q S E T A L L T W R P P R A S V T G Y L L V Y E S V D G T V K E V I V G P D T T S Y S L A D L S P S T H Y T A K I Q A L N G P L R S N M I Q T I F T T I G L L Y P F P K D C S Q A M L N G D T T S G L Y T I Y L N G D K A E A L E V F C D M T S D G G G W I V F L R R K N G R E N F Y Q N W K A Y A A G F G D R R E E F W L G L D N L N K I T A Q G Q Y E L R V D L R D H G E T A F A V Y D K F S V G D A K T R Y K L K V E G Y S G T A G D S M A Y H N G R S F S T F D K D T D S A I T N C A L S Y K G A F W Y R N C H R V N L M G R Y G D N N H S Q G V N W F H W K G H E H S I Q F A E M K L R P S N F R N L E G R R K R A
Biological Activity	Measured by the ability of the immobilized protein to block Fibronectin-mediated adhesion of NIH-3T3 mouse embryonic fibroblast cells. rhTenascin-C immobilized at 15 μg/mL, in the presence of 0.1 μg/mL human Fibronectin, will block approximately 54.61% NIH3/T3 cell adhesion ($5x10^4$ cells/well, 100 μL/well)
Appearance	Lyophilized powder
Formulation	Lyophilized after extensive dialysis against solution in PBS, 6% Trehalose, pH 7.4 or 10 mM Tris-HCl, 1 mM EDTA, 6% Trehalose, pH 8.0 or 50 mM Tris-HCL, 300 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The TNC protein, an extracellular matrix protein, plays a crucial role in guiding migrating neurons and axons during development, contributing to processes such as synaptic plasticity and neuronal regeneration. It facilitates neurite outgrowth from cortical neurons grown on a monolayer of astrocytes, indicative of its involvement in the intricate cellular interactions within the nervous system. Acting as a ligand for integrins alpha-8/beta-1, alpha-9/beta-1, alpha-V/beta-3, and alpha-V/beta-6, TNC establishes molecular connections essential for cellular communication and signaling. In the context of tumors, TNC stimulates angiogenesis by promoting the elongation, migration, and sprouting of endothelial cells. Structurally, TNC exists as a homohexamer, with a potential homotrimer formation in the triple coiled-coil region, further stabilized by disulfide rings at both ends. This versatile protein also interacts with CSPG4, indicating its involvement in diverse cellular and molecular processes across different biological contexts.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA