

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse WISP-1/CCN4 in direct ELISAs and Western blots. In direct ELISAs and Western blots, this antibody shows approximately 10-30% cross-reactivity with recombinant human (rh) WISP-1 but no cross-reactivity with rhCTGF or rmNOV.
Source	Monoclonal Rat IgG _{2B} Clone # 214203
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse WISP-1/CCN4 Leu21-Asn367 Accession # O54775
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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

Mouse WISP-1 (Wnt-induced secreted protein-1; also named CNN4) is a 40 kDa, secreted, heparin-binding glycoprotein that is a member of the CCN (or CTGF/Cyr61/Nov) cysteine-rich protein family (1- 6). It is synthesized as a 367 amino acid (aa) precursor that contains a series of structural homology modules. Following a 22 aa signal sequence, there is a 68 aa IGF1-like domain (aa 53-120), a 66 aa von Willebrand factor type C (VWC) module (aa 121-186), a 41 aa TSP type I domain (aa 220-260) and a 75 aa, C-terminal cysteine knot motif (aa 273-347) (1, 6). The VWC module is associated with protein-protein interaction, the TSP domain binds sulfated glycoconjugates, and the cysteine knot mediates dimerization and receptor binding (4). It is likely that WISP-1 normally circulates as an 80 kDa homodimer (2). Multiple splice forms are reported for human WISP-1, but none for rodent (7-9). Mature mouse WISP-1 is 98%, 84%, and 85% aa identical to rat, canine, and human WISP-1, respectively. WISP-1 is expressed by fibroblasts and osteoblasts, and may contribute to fracture healing by promoting bone cell formation (1, 10, 11).

PRODUCT SPECIFIC NOTICES

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