



Murine Monoclonal Antibodies to N-terminal FN1 Modules of Fibronectin

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The Wisconsin Alumni Research Foundation (WARF) is seeking commercial partners interested in reagents useful for investigating the different roles of fibronectin and developing therapeutics to prevent fibrosis.

Overview

Fibronectin (FN) is a large glycoprotein that plays an important role in the formation of extracellular matrices that are necessary for embryogenesis, tissue renewal, and various pathophysiologic processes. FN converts from its soluble form to insoluble matrix fibrils by assembling at regulated sites on cell surfaces. FN's interaction with these sites is mediated by FNI modules in the N-terminal 70-kDa region of FN (70K region). Because FN plays an important role in many processes and can be associated with certain pathologies, new reagents are always needed to probe the roles and associations of FN.

The Invention

UW-Madison researchers have generated, selected, and characterized three mouse monoclonal antibodies to the 70K region of human FN (4D1 binds to an epitope centered on Arg107 in the FNI-2 module, 7D5 binds to an epitope centered on Ser220 in the FNI-4 module, and 5C3 binds centered on Gly567 in the FNI-9 module). The three antibodies span the 70K region, and they have been successfully tested for blocking assembly of fibronectin and binding of polypeptides to the 70K region by beta-zipper formation.

Applications

- Investigating the different roles of FN
- Developing a therapeutic to prevent fibrosis

Key Benefits

- Well-characterized and complementary set of reagents
- The antibodies have been tested for blocking assembly of FN and binding of polypeptides to the 70K fragment

Tech Fields

- [Research Tools : Antibodies](#)

For current licensing status, please contact Jennifer Gottwald at jennifer@warf.org or 608-960-9854

