

CLINICAL SPECIFICATIONS

FIBULIN

Function:

Fibulin is a calcium-binding glycoprotein found in blood and extracellular matrices. In the extracellular matrix, Fibulin associates with basement membranes and elastic fibers. This association with these matrix structures is mediated by Fibulin's ability to interact with numerous extracellular matrix constituents including fibronectin, proteoglycans, laminins and tropoelastin. In blood, Fibulin binds to fibrinogen and incorporates into clots.

Antibodies Appear:

Atherosclerotic Lesions¹
 Osteoarthritis³

Known Cross-Reactions:

Clinical Significance:

Antibodies to Fibulin may be a contributing factor in the immunological pathways implicated in the pathogenesis of Osteoarthritis.³ To a lesser extent, anti-Fibulin antibodies were found in patients with Rheumatoid Arthritis, Systemic Lupus Erythematosus and Systemic Scleroderma.³ Due to its characteristic of fibrinogen-binding,^{1,2} Fibulin has been shown to play a role in the etiology and progression of cardiovascular diseases. Fibulin is a coagulation component of coronary artery atherosclerotic lesions.^{1,2}

References:

1. Argraves, et al. Fibulin-1 and fibrinogen in human atherosclerotic lesions. *Histochem Cell Biol*, 2009; 132:559-565.
2. Tran, et al. The interaction of fibulin-1 with fibrinogen: A potential role in hemostasis and thrombosis. *J Biologic Chem*, 1995; 270(33):19458-19464.
3. Xiang, et al. Fibulin-4 is a target of autoimmunity predominantly in patients with osteoarthritis. *J Immunol*, 2006; 176:3196-3204.