



TECH TO BUSINESS

CONTACT: ipm@innovatecalgary.com • (403) 284-6400

Monoclonal Antibodies for Detection of GWBs

TECH ID #: 281.6

Background

GW bodies (GWBs, also known as mammalian P bodies) influence the expression and fate of mRNA, and thus the overall cellular mRNA profile. They are involved in the storage, transport and degradation of a subset of mRNA. GWBs are also linked to the RNA interference (RNAi) pathway resulting in either mRNA decay and/or translational repression.

Researchers at the University of Calgary have developed mouse monoclonal antibodies that specifically bind the GW182 protein, a mRNA binding protein within GWBs. These antibodies can be utilized to detect the GW182 protein and GWBs by indirect immunofluorescence, immunohistochemistry, immunoprecipitation, and by Western blot analysis. These monoclonal antibodies can be used as reference markers to validate the presence of autoantibodies to GWBs in patients with motor/sensory neuropathy, Sjögren's syndrome and systemic lupus erythematosus (SLE).

Areas of Application

- Immunohistochemistry of archived tissues
- Immunofluorescence
- Immunoprecipitation
- Western blot analysis
- Serology: diagnostics and clinical assays using these monoclonal antibodies

Competitive Advantages

- An effective monoclonal antibody to the GW182 protein that works in multiple applications

Intellectual Property Status

- [US patent 7,452,676](#)

Publications

- [Hybrid Hybridomics. 2003 Apr;22\(2\):79-86.](#)
- [J Mol Med. 2003 Dec;81\(12\):811-8.](#)