

## Aciculin / Phosphoglucomutase 5 (PGM5) Antibody

Mouse Monoclonal Antibody [Clone PGM5/3552]

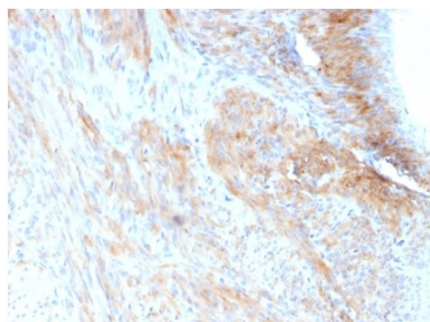
Catalog No	Format	Size
5239-MSM2-P0	Purified Ab with BSA and Azide	200ug/ml
5239-MSM2-P1	Purified Ab with BSA and Azide	200ug/ml
5239-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Immunofluorescence (IF)	1-3ug/ml
Immunohistochemistry (IHC)	1-2ug/ml
Western Blot (WB)	2-4ug/ml

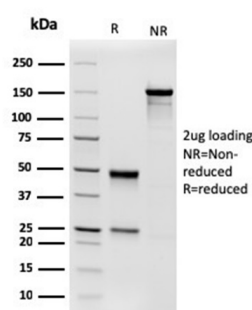
Product Details	
Clone	PGM5/3552
Gene Name	PGM5
Immunogen	Recombinant full-length human PGM5 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2a / Kappa
Mol. Weight of Antigen	56kDa
Cellular Localization	Adherens junction, Cell junction, Cell membrane, Cytoplasm, Cytoskeleton, Sarcolemma
Species Reactivity	Cow, Human, Mouse, Rabbit, Rat
Positive Control	Human heart muscle or smooth muscle (IHC). Mouse heart tissue lysate (WB).

*\*Optimal dilution for a specific application should be determined.*

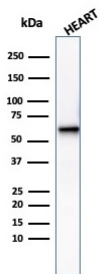
### Product Images for Aciculin / Phosphoglucomutase 5 (PGM5) Antibody



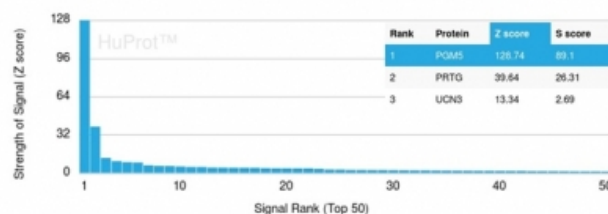
Formalin-fixed, paraffin-embedded human uterus stained with Aciculin Mouse Monoclonal Antibody (PGM5/3552) at 2ug/ml. HIER: Tris/EDTA, pH9.0, 45min. 2 °: HRP-polymer, 30min. DAB, 5min.



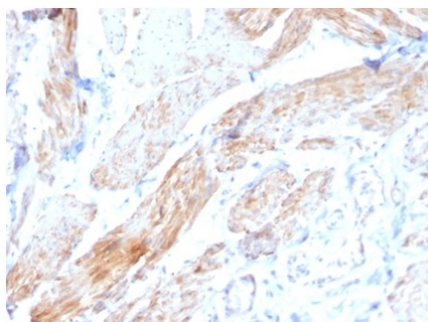
SDS-PAGE Analysis Purified Aciculin Mouse Monoclonal Antibody (PGM5/3552). Confirmation of Purity and Integrity of Antibody.



Western Blot Analysis of human heart tissue lysate using Aciculin Mouse Monoclonal Antibody (PGM5/3552).



Analysis of Protein Array containing more than 19,000 full-length human proteins using Monospecific Mouse Monoclonal Antibody to Aciculin (PGM5/3552). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human bladder stained with Aciculin Mouse Monoclonal Antibody (PGM5/3552) at 2ug/ml. HIER: Tris/EDTA, pH9.0, 45min. 2 °: HRP-polymer, 30min. DAB, 5min.

## Specificity & Comments

Aciculin, also known as PGM5 (phosphoglucosyltransferase 5) or PGM5P, is a 567 amino acid protein that belongs to the phosphoglucosyltransferase family of phosphotransferases, which play an important role in the interconversion of glucose-1-phosphate and glucose-6-phosphate. Localized to the cell junction and expressed at high levels in smooth and cardiac muscle, Aciculin binds magnesium as a cofactor and interacts with dystrophin and utrophin, possibly playing a role in cytoskeletal organization and function. Aciculin exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome.

## Known Applications & Suggested Dilutions

ELISA (For coating, order antibody without BSA) | Immunofluorescence (1-2ug/ml) | Western Blot (1-2ug/ml) | Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT) (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 °C followed by cooling at RT for 20 minutes), Optimal dilution for a specific application should be determined.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

## Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide store at 2 to 8 °C. Antibody without azide store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.