

# Aciculin / Phosphoglucomutase 5 (PGM5) Antibody

Mouse Monoclonal Antibody [Clone PGM5/3552]

Catalog No	Format	Size
5239-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5239-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5239-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

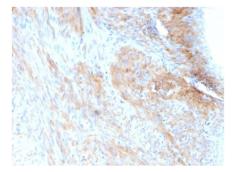
Applications	Tested Dillution	Note
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

#### **Product Details**

Clone	PGM5/3552		
Gene Name	PGM5		
mmunogen	Recombinant full-length human PGM5 protein		
lost	Mouse		
Clonality	Monoclonal		
sotype / Light Chain	IgG2a / Kappa		
lol. Weight of Antigen	56kDa		
ellular Localization	Adherens junction, Cell junction, Cell membrane, Cytoplasm, Cytoskeleton, Sarcolemma		
pecies Reactivity	Cow, Human, Mouse, Rabbit, Rat		
ositive 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

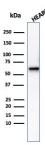


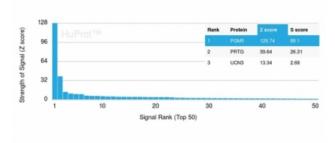
Formalin-fixed, paraffin-embedded human uterus stained with Aciculin Mouse Monoclonal Antibody (PGM5/3552) at 2ug/ml. HIER: Tris/EDTA, pH9.0, 45min. 2 °: HRP-polymer, 30min. DAB, 5min.

kDa		R	NR	
250				
150 —			-	
100				
75	-			2ug loading
50 —	-	_		NR=Non- reduced
37	-			R=reduced
25	=	-		
15				
10				

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

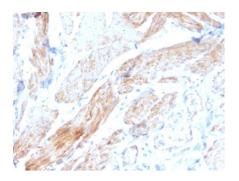






Western Blot Analysis of human heart tissue lysate using Aciculin Mouse Monoclonal Antibody (PGM5/3552).

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 HuProtTM 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 HuProtTM 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 specific to its intended target, if the MAb has an S-score of 41 least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein X 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 (phosphoglucomutase 5) or PGMRP, is a 567 amino acid protein that belongs to the phosphoglucomutase 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.

#### **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.

#### 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.

