10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Profilin 1 Rabbit mAb

Catalog # AP74920

Product Information

Application	WB, IHC-P, FC
Primary Accession	P07737
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	15054

Additional Information

Gene ID	5216
Other Names	PFN1
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A FC~~1:100-1:200
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

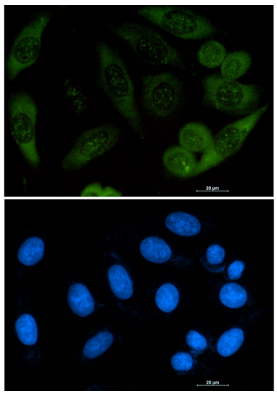
Name	PFN1
Function	Binds to actin and affects the structure of the cytoskeleton. At high concentrations, profilin prevents the polymerization of actin, whereas it enhances it at low concentrations. By binding to PIP2, it inhibits the formation of IP3 and DG. Inhibits androgen receptor (AR) and HTT aggregation and binding of G-actin is essential for its inhibition of AR.
Cellular Location	Cytoplasm, cytoskeleton.
Tissue Location	Expressed in epididymis (at protein level).

Background

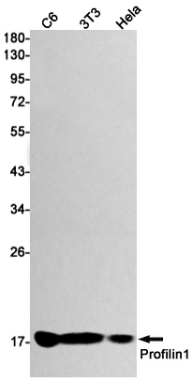
Profilin-1 (PFN1) plays an important role in the control of actin dynamics, and could represent an important

therapeutic target in several diseases. PFN1 is identified as a huntingtin aggregation inhibitor, and may serves as a tumor-suppressor. PFN1 is crucial for the conversion of monomeric (G)-actin to filamentous (F)-actin. Amyotrophic lateral sclerosis (ALS) is a late-onset neurodegenerative disorder resulting from motor neuron death. Cells expressing PFN1 mutants contain ubiquitinated, insoluble aggregates that in many cases contain the ALS-associated protein TDP-43. Recently, PFN1 is a potential biomarker for bladder cancer aggressiveness and may be of great clinical importance.

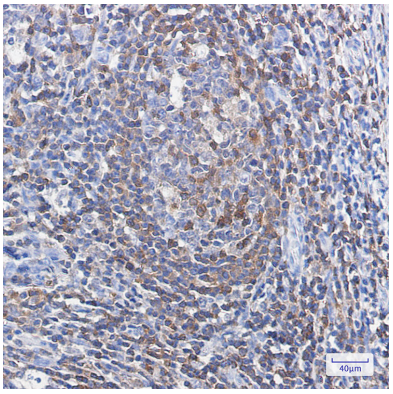
Images



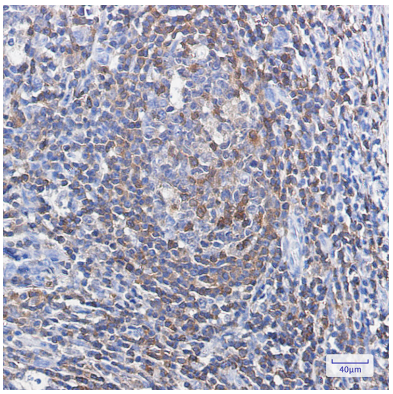
Immunocytochemistry analysis of Profilin 1 (green) in A549 using Profilin 1 antibody,and DAPI(blue).



Western blot analysis of Profilin 1 in C6, 3T3, Hela lysates using Profilin 1 antibody.



Immunohistochemistry analysis of paraffin-embedded Human tonsil using Profilin 1 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.