

# Myosin XVIIIa (N-15): sc-48252

## BACKGROUND

Myosin XVIIIa, also designated MYO18A, MAJN, MYSPDZ, surfactant protein A receptor (SPR210) or TGF $\beta$ 1-induced antiapoptotic factor 1, is a TGF $\beta$ 1-induced antiapoptotic factor known to inhibit the cytotoxic effects of TNF $\alpha$  on mouse fibroblasts. Two isoforms of mouse Myosin XVIIIa, designated MysPDZ $\alpha$  and MysPDZ $\beta$ , have been identified. MysPDZ $\alpha$  consists of a KE-rich region, an N-terminal PDZ domain and a prevalent Myosin homologous head region, neck (with one IQ motif) and coiled-coil tail. The MysPDZ $\beta$  isoform lacks the KE-rich region and PDZ domain. MysPDZ $\alpha$  is present in most tissues and is known to co-localize with the ER-Golgi complex and with membrane ruffles and filopodia. MysPDZ $\beta$  is expressed specifically in hematopoietic tissues and cell lines and shows dispersed localization in the cytoplasm.

## CHROMOSOMAL LOCATION

Genetic locus: TIAF1 (human) mapping to 17q11.2; Tiaf1 (mouse) mapping to 11 B5.

## SOURCE

Myosin XVIIIa (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Myosin XVIIIa of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-48252 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

Myosin XVIIIa (N-15) is recommended for detection of Myosin XVIIIa isoforms 1 and 3 only of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Myosin XVIIIa siRNA (h): sc-106272, Myosin XVIIIa siRNA (m): sc-61129, Myosin XVIIIa shRNA Plasmid (h): sc-106272-SH, Myosin XVIIIa shRNA Plasmid (m): sc-61129-SH, Myosin XVIIIa shRNA (h) Lentiviral Particles: sc-106272-V and Myosin XVIIIa shRNA (m) Lentiviral Particles: sc-61129-V.

Molecular Weight of MysPDZ $\alpha$ : 230 kDa.

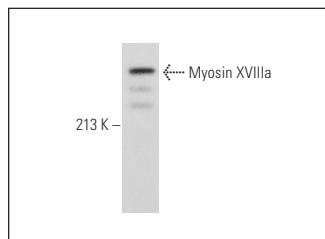
Molecular Weight of MysPDZ $\beta$ : 190 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



Myosin XVIIIa (N-15): sc-48252. Western blot analysis of Myosin XVIIIa expression in IMR-32 whole cell lysate.

## SELECT PRODUCT CITATIONS

- Hsu, R.M., et al. 2010. Identification of MYO18A as a novel interacting partner of the PAK2/ $\beta$ PIX/GIT1 complex and its potential function in modulating epithelial cell migration. *Mol. Biol. Cell* 21: 287-301.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Myosin XVIIIa (H-10): sc-365328**, our highly recommended monoclonal alternative to Myosin XVIIIa (N-15).