

## FXYD1 Blocking Peptide (C-term)

Synthetic peptide

Catalog # BP20771c

### Specification

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#### FXYD1 Blocking Peptide (C-term) - Product Information

Primary Accession [Q00168](#)  
Other Accession [Q08589](#), [Q9Z239](#),  
[Q3SZX0](#)

#### FXYD1 Blocking Peptide (C-term) - Additional Information

Gene ID 5348

#### Other Names

Phospholemman, FXYD domain-containing ion transport regulator 1, FXYD1, PLM

#### Target/Specificity

The synthetic peptide sequence is selected from aa 69-81 of HUMAN FXYD1

#### Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

#### FXYD1 Blocking Peptide (C-term) - Protein Information

Name FXYD1 ([HGNC:4025](#))

#### Function

Associates with and regulates the activity of the sodium/potassium-transporting ATPase (NKA) which transports Na(+) out of the cell and K(+) into the cell. Inhibits NKA activity

#### FXYD1 Blocking Peptide (C-term) - Background

May have a functional role in muscle contraction. Induces a hyperpolarization-activated chloride current when exogenously expressed.

#### FXYD1 Blocking Peptide (C-term) - References

Chen L.-S.K., et al. Genomics 41:435-443(1997).  
Sweadner K.J., et al. Genomics 68:41-56(2000).  
Ota T., et al. Nat. Genet. 36:40-45(2004).  
Mounsey J.P., et al. J. Biol. Chem. 275:23362-23367(2000).  
Tulloch L.B., et al. J. Biol. Chem. 286:36020-36031(2011).

in its unphosphorylated state and stimulates activity when phosphorylated. Reduces glutathionylation of the NKA beta-1 subunit ATP1B1, thus reversing glutathionylation-mediated inhibition of ATP1B1. Contributes to female sexual development by maintaining the excitability of neurons which secrete gonadotropin-releasing hormone.

**Cellular Location**

Cell membrane, sarcolemma  
{ECO:0000250|UniProtKB:P56513};  
Single-pass type I membrane protein. Apical cell membrane  
{ECO:0000250|UniProtKB:O08589};  
Single-pass type I membrane protein.  
Membrane, caveola  
{ECO:0000250|UniProtKB:O08589}. Cell membrane, sarcolemma, T-tubule  
{ECO:0000250|UniProtKB:O08589}.  
Note=Detected in the apical cell membrane in brain. In myocytes, localizes to sarcolemma, t-tubules and intercalated disks. {ECO:0000250|UniProtKB:O08589}

**Tissue Location**

Highest expression in skeletal muscle and heart. Moderate levels in brain, placenta, lung, liver, pancreas, uterus, bladder, prostate, small intestine and colon with mucosal lining. Very low levels in kidney, colon and small intestine without mucosa, prostate without endothelial lining, spleen, and testis

**FXD1 Blocking Peptide (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)