

**Goat Anti-ZASP/ CYPHER / LDB3 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2168a****Specification**

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**Goat Anti-ZASP/ CYPHER / LDB3 Antibody - Product Information**

|                   |  |
|-------------------|--|
| Application       | WB, E  |
| Primary Accession | <a href="#">O75112</a>                               |
| Other Accession   | <a href="#">NP_001073585</a> , <a href="#">11155</a> |
| Reactivity        | Human  |
| Predicted         | Mouse, Rat, Pig, Dog                                 |
| Host              | Goat   |
| Clonality         | Polyclonal   |
| Concentration     | 100ug/200ul  |
| Isotype           | IgG  |
| Calculated MW     | 77135  |

**Goat Anti-ZASP/ CYPHER / LDB3 Antibody - Additional Information****Gene ID** 11155**Other Names**

LIM domain-binding protein 3, Protein cypher, Z-band alternatively spliced PDZ-motif protein, LDB3  
([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=15710](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=15710))  
target="\_blank">HGNC:15710</a>)

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-ZASP/ CYPHER / LDB3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-ZASP/ CYPHER / LDB3 Antibody - Protein Information****Name** LDB3 ([HGNC:15710](#))**Function**

May function as an adapter in striated muscle to couple protein kinase C-mediated signaling via its LIM domains to the cytoskeleton.

**Cellular Location**

Cytoplasm, perinuclear region. Cell projection, pseudopodium. Cytoplasm, cytoskeleton. Cytoplasm, myofibril, sarcomere, Z line. Note=Localized to the cytoplasm around nuclei and pseudopodia of undifferentiated cells and detected throughout the myotubes of differentiated cells. Colocalizes with ACTN2 at the Z-lines

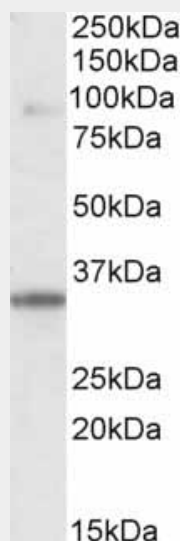
**Tissue Location**

Expressed primarily in skeletal muscle and to a lesser extent in heart. Also detected in brain and placenta

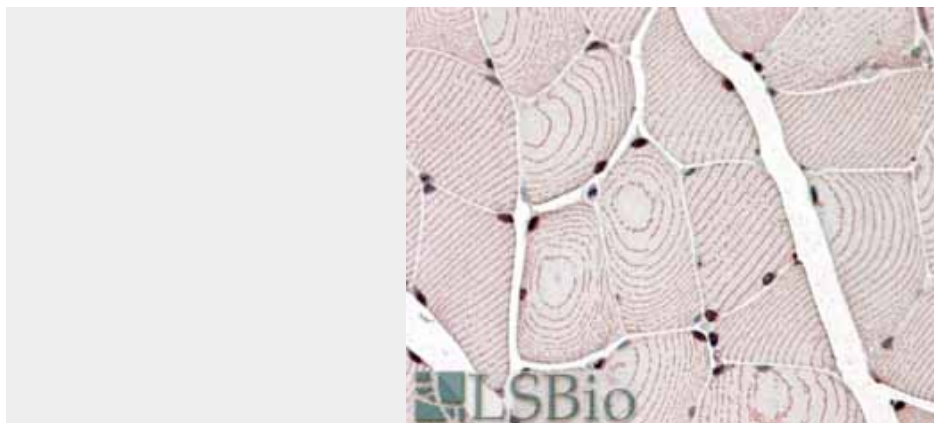
**Goat Anti-ZASP/ CYPHER / LDB3 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-ZASP/ CYPHER / LDB3 Antibody - Images**

AF2168a (0.1 µg/ml) staining of Human Skeletal Muscle lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF2168a (3.8 µg/ml) staining of paraffin embedded Human Skeletal Muscle. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. This data was obtained using a previous batch.

### **Goat Anti-ZASP/ CYPHER / LDB3 Antibody - Background**

This gene encodes a PDZ domain-containing protein. PDZ motifs are modular protein-protein interaction domains consisting of 80-120 amino acid residues. PDZ domain-containing proteins interact with each other in cytoskeletal assembly or with other proteins involved in targeting and clustering of membrane proteins. The protein encoded by this gene interacts with alpha-actinin-2 through its N-terminal PDZ domain and with protein kinase C via its C-terminal LIM domains. The LIM domain is a cysteine-rich motif defined by 50-60 amino acids containing two zinc-binding modules. This protein also interacts with all three members of the myozenin family. Mutations in this gene have been associated with myofibrillar myopathy and dilated cardiomyopathy. Alternatively spliced transcript variants encoding different isoforms have been identified; all isoforms have N-terminal PDZ domains while only longer isoforms (1, 2 and 5) have C-terminal LIM domains.

### **Goat Anti-ZASP/ CYPHER / LDB3 Antibody - References**

A novel custom resequencing array for dilated cardiomyopathy. Zimmerman RS, et al. Genet Med, 2010 May. PMID 20474083.  
Common susceptibility variants examined for association with dilated cardiomyopathy. Rampersaud E, et al. Ann Hum Genet, 2010 Mar. PMID 20201937.  
Differences in aberrant expression and splicing of sarcomeric proteins in the myotonic dystrophies DM1 and DM2. Vihola A, et al. Acta Neuropathol, 2010 Apr. PMID 20066428.  
Candidate-gene testing for orphan limb-girdle muscular dystrophies. Aurino S, et al. Acta Myol, 2008 Dec. PMID 19472918.  
Impaired binding of ZASP/Cypher with phosphoglucomutase 1 is associated with dilated cardiomyopathy. Arimura T, et al. Cardiovasc Res, 2009 Jul 1. PMID 19377068.