

## Product datasheet for **AP06642PU-N**

### MSC Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunohistochemistry on paraffin sections</b> 1/50-1/200.
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 141-190 of Human Musculin.
Specificity:	This antibody detects endogenous levels of Musculin protein. (region surrounding Arg167)
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 22 kDa
Gene Name:	musculin
Database Link:	<a href="#">Entrez Gene 9242 Human O60682</a>



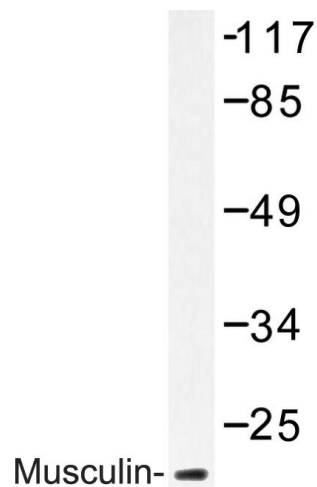
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**Background:**

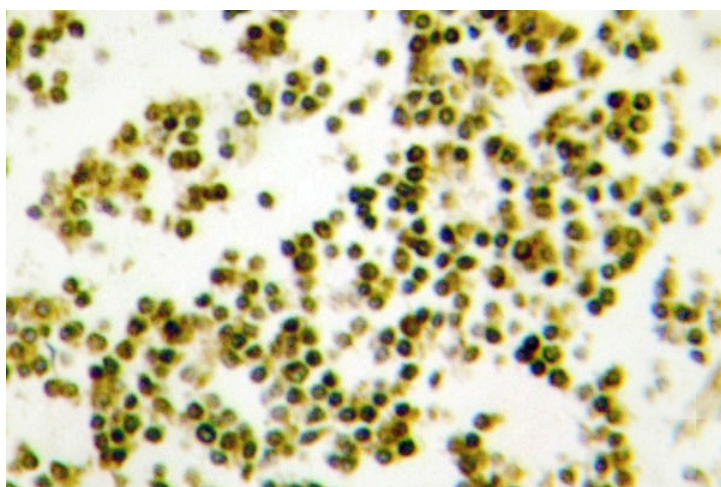
Differentiation of myogenic cells is regulated by multiple positively and negatively acting factors. One well characterized family of helix-loop-helix (HLH) proteins, known to play an important role in the regulation of muscle cell development, includes MyoD, myogenin and musculin (also designated MyoR). Members of this group of transcription factors form heterodimers with products of a more widely expressed family of bHLH genes, the E family, which consists of at least three distinct genes: E2A, IF2 and HEB. MyoD-E or musculin-E heterodimers bind avidly to consensus E box motifs, which are functionally important elements in the promoter regions of many musclespecific terminal differentiation genes. MyoD complexes potently induce transcriptional activation, while musculin complexes bind adjacent to MyoD DNA-binding regions to represses MyoD activity, which then results in the delayed expression of muscle-specific genes. Musculin is highly expressed in undifferentiated and proliferating myoblasts in culture, and its expression is down regulated during myogenesis and at the onset of terminal differentiation.

**Synonyms:**

MSC, ABF1, ABF-1, Activated B-cell factor 1

**Product images:**

Western blot (WB) analysis of Musculin antibody in extracts from Jurkat cells.



Immunohistochemistry (IHC) analyzes of Musculin antibody in paraffin-embedded human lymph node tissue.