



## Desmin (K5)

**CATALOG NUMBER:** MUB0402S

**SPECIES / ISOTYPE:** rabbit polyclonal Ig

**PRODUCT FORM:** antiserum

### BACKGROUND

Desmin is a 53 kDa intermediate filament protein and exhibits a high degree of tissue specificity, its expression being predominantly confined to all types of muscle cells (cardiac, skeletal and smooth muscle). Regulation of desmin expression is stage and tissue-specific, since it is induced during terminal development and muscle cell differentiation. In skeletal en cardiac muscle cells desmin is localized in the Z-disk region and at the intercalated disk. The expression pattern of desmin in smooth muscle is much more heterogenous. Coexpression of desmin and vimentin has been observed in tumors derived from muscle tissue, i.e. rhabdomyosarcomas and leiomyosarcomas. Furthermore, during myocard dysfunction dramatic changes in the distribution of desmin have been observed.

### SOURCE

K5 is a rabbit serum directed against chicken gizzard muscle desmin. Desmin was purified from a crude tissue preparation by preparative gel electrophoresis as described in reference 1.

### PRODUCT

Each vial contains 250 µl rabbit polyclonal antiserum containing 0.09% sodium azide.

### SPECIFICITY

K5 reacts exclusively with desmin, which is expressed in smooth and striated muscle cells and their tumors.

K5 is suitable for immunoblotting and immunohistochemistry on frozen and **paraffin**-embedded tissues. Optimal antibody dilution should be determined by titration; recommended range is 1:25 – 1:100 for immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent, and 1:100 – 1:500 for immunoblotting applications.

### SPECIES REACTIVITY

Human, goat, dog, rat, hamster, mouse, chicken.

### STORAGE

Store at 4°C, or for longer storage in small aliquots at -20°C.

### REFERENCES

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8. Raats JM, Pieper FR, Vree Egberts WT, Verrijp KN, Ramaekers FC, Bloemendal H (1990). Assembly of amino-terminally deleted desmin in vimentin-free cells. *J Cell Biol*, 111, 1971-85.
9. Council, L., Hameed, O. (2009). Differential expression of immunohistochemical markers in bladder smooth muscle and myofibroblasts, and the potential utility of desmin, smoothelin, and vimentin in staging of bladder carcinoma *Modern Pathology* 22, 639-50.

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### WARNING and CAUTION

This product is intended FOR RESEARCH USE ONLY, and FOR TESTS IN VITRO, not for use in diagnostic or therapeutic procedures involving humans or animals.

This product contains sodium azide. To prevent formation of toxic vapors, do not mix with strong acidic solutions. To prevent formation of potentially explosive metallic azides in metal plumbing, always wash into drain with copious quantities of water.

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