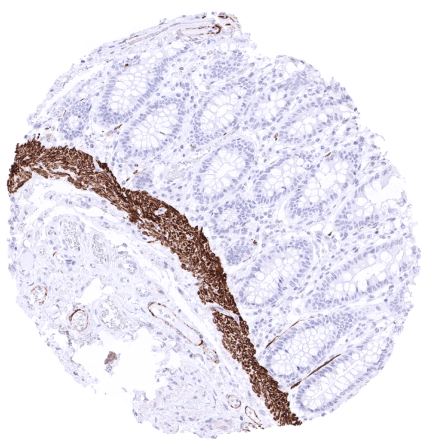


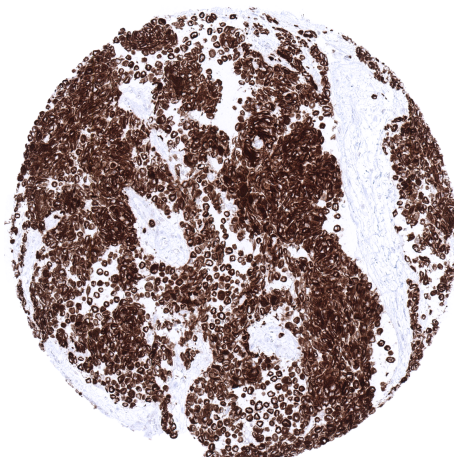
## Anti- Desmin Antibody MSVA-651M / Recombinant Mouse monoclonal

Human SwissProt	P17661
Human Gene Symbol	DES
Synonyms	CMD1i; CSM1; CSM2; DES; Intermediate filament protein
Specificity	Desmin
Immunogen	Recombinant protein of human CD5
Isotype	Mouse / IgG
Species Reactivity	Human
Localization	Cytoplasmic

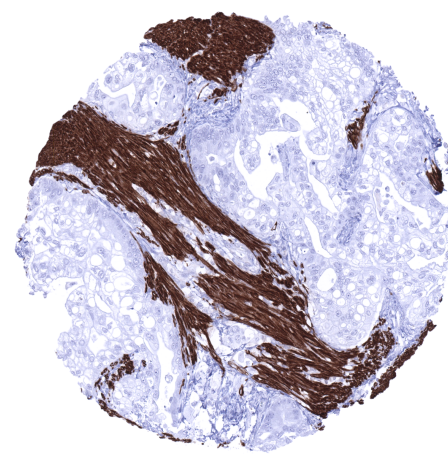
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non-hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Positive Control	Appendix: Smooth muscle cells in the lamina muscularis mucosae and muscularis propria must show a strong cytoplasmic staining while staining should be at least moderate in most smooth muscle cells of blood vessels and in dispersed myofibroblasts.
Negative Control	Appendix: Desmin staining should not be seen in lymphocytes and epithelial cells.



**Rectum: Strong desmin staining of lamina muscularis mucosae.**



**Soft tissue: Strong desmin positivity of all tumor cells of a rhabdomyosarcoma.**



**Stomach: Gastric adenocarcinoma invading desmin positive smooth muscle fibres.**

### Biology

Desmin is a 53.5 kD protein coded by the DES gene at 2q35. Desmin is a muscle-specific subunit of intermediate filaments that does not play a role in contractility but organizes sarcomere architecture. Desmin is expressed in all striated muscle cells and in most smooth muscle cells. In the developing striated muscle cells desmin gradually replaces vimentin. Desmin has a pivotal role in muscle function. The accumulation of cleaved and misfolded desmin is a critical cellular feature of heart failure which can be reversed by therapy. Desmin mutations have been associated with various subtypes of cardiomyopathies and with myopathies. In normal tissues, desmin immunostaining is seen in smooth muscle, skeletal muscle and in heart muscle. In the heart, an accentuation of staining occurs at the intercalated disks. Smooth muscle staining is diminished in arteriolar blood vessels, where it is often limited to a subset of fibres. Desmin immunostaining is also seen in myofibroblasts and in placenta stroma cells. Among tumors, desmin is almost always expressed in tumors of myogenic origin such as leiomyoma, leiomyosarcoma and rhabdomyosarcoma. Poorly differentiated myogenic tumors may lose desmin expression. Other malignant mesenchymal tumors such as fibrosarcoma, liposarcoma and carcinosarcoma often show focal desmin positivity reflecting focal myogenic differentiation. A few non-myogenic tumors such as lung adenocarcinoma, malignant melanoma and gliomas have been reported to occasionally express desmin. Gastrointestinal stromal tumour (GIST) is almost always desmin negative.

### Potential Research Applications

- Desmin plays a pivotal role in muscular function, especially in the heart. The role of desmin in heart failure is under investigation.
- The prevalence and role of desmin expression in non-myogenic tumors has not been sufficiently clarified.

### Protocol Suggestions

**Dilution: 1:150 ; pH 9 is optimal.** Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

### Limitations

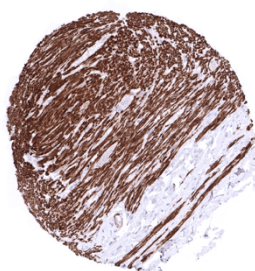
This antibody is available for **research use only** and is not approved for use in diagnostics. Not for resale without express authorization.

### Warranty

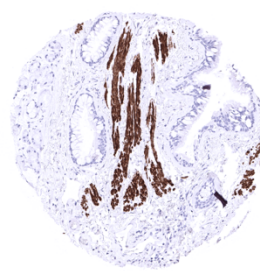
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



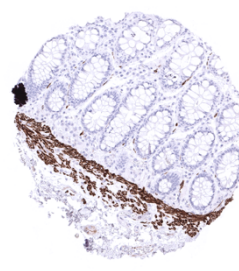
Aorta, media



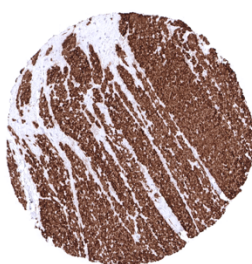
Appendix, mucosa



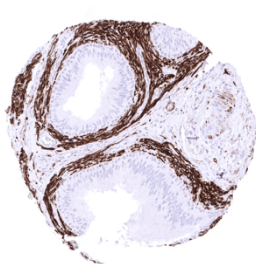
Bronchus, mucosa



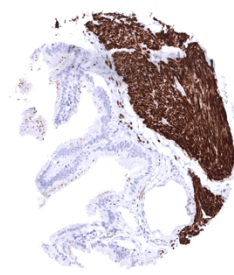
Colon descendens, mucosa



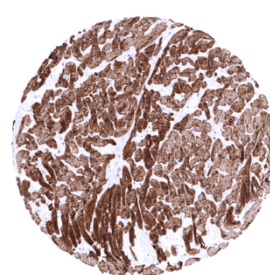
Colon descendens, muscular wall



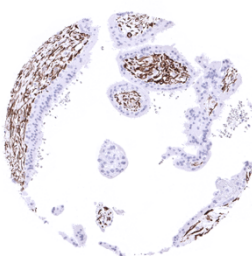
Epididymis



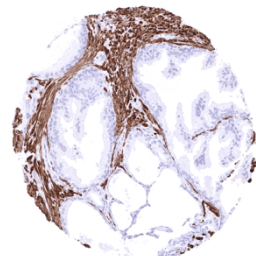
Gallbladder, epithelium



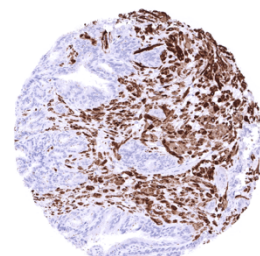
Heart



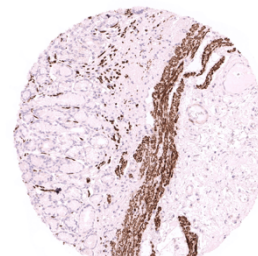
Placenta, early



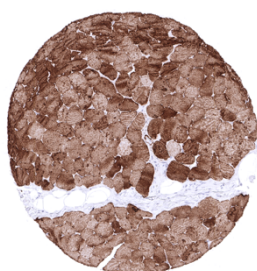
Prostate



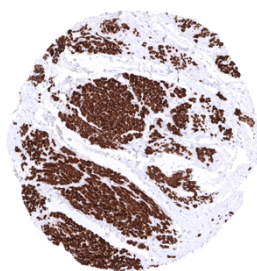
Seminal vesicle



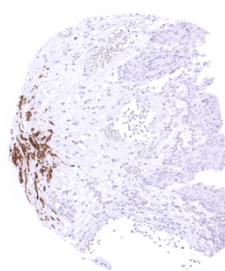
Stomach, antrum



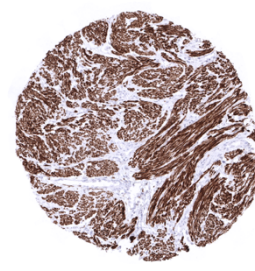
Striated muscle



Urinary bladder, muscular wall



Urinary bladder, urothelium



Uterus, myometrium