

# Novocastra™ Ready-to-Use Mouse Monoclonal Antibody Desmin

## Product Code: RTU-DES-DERII

<b>Intended Use</b>	FOR RESEARCH USE ONLY.
<b>Specificity</b>	Human desmin, a 53 kD intermediate filament protein in muscle cells. Also reacts with rat, chicken, dog, guinea pig, mouse and hamster desmin.
<b>Clone</b>	DE-R-11
<b>Ig Class</b>	IgG1
<b>Antigen Used for Immunizations</b>	Purified porcine desmin.
<b>Preparation</b>	Tissue culture supernatant diluted in 5% horse serum in PBS containing 12 mM sodium azide. Volume as indicated on vial label.
<b>Effective on Frozen Tissue</b>	Yes
<b>Effective on Paraffin Wax Embedded Tissue</b>	Yes, trypsin digestion of paraffin sections is recommended.
<b>Recommendations on Use</b>	Immunohistochemistry: Typical working dilution: NEAT. 15 minutes primary antibody incubation at 25 °C when used in conjunction with the Novostain Universal Detection Kit (Ready to Use), code NCL-RTU-D. Recommendations on use will differ if other detection systems are used eg Standard ABC technique. Western Blotting: Not recommended. Not recommended for use on Ventana automated staining systems (Ventana Medical Systems Inc., USA).
<b>Positive Controls</b>	Immunohistochemistry: Bowel wall should show distinct staining of the muscularis propria.
<b>Staining Pattern</b>	Cytoplasmic.
<b>Storage and Stability</b>	Store ready-to-use prediluted liquid antibody at 4 °C. Return to 4 °C immediately after use. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label.
<b>General Overview</b>	RTU-DES-DERII reacts with an 18 kD rod piece of the intermediate filament protein desmin (53 kD) in muscle cells. The antibody does not appear to recognise other intermediate filament proteins. In normal tissues, RTU-DES-DERII reacts with both striated (skeletal and cardiac) and smooth muscle cells. The labelling is confined to the Z bands in skeletal and cardiac muscle giving a characteristic striated appearance.
<b>General References</b>	Altmannsberger M, Weber K, Droste R, et al.. American Journal of Pathology. 118: 85–98 (1985). Osborn M, Altmannsberger M, Debus E, et al.. Cancer Cells 1. The transformed phenotype. Cold Spring Harbor Lab. 191–200 (1984). Debus E, Weber K and Osborn M. The EMBO Journal. 2 (12): 2305–2312 (1983).



# Instructions for Use

## Trypsin Digestion for Immunohistochemical Demonstration on Paraffin Sections

1. Preheat the following to 37 °C using a water bath:
  - (i) 200 mL of TBS
  - (ii) 200 mL of distilled water.
2. Dissolve 0.2 g Trypsin 250 and 0.2 g Calcium chloride in the 200 mL of TBS.
3. Once the Trypsin solution is at 37 °C, pH to 7.8 with 1 M sodium hydroxide.
4. Place rehydrated paraffin sections in the distilled water to preheat the sections to 37 °C for a minimum of 5 minutes.
5. Incubate sections in Trypsin solution at 37 °C. The time required will depend on the antibody and tissue, however, 30 minutes is usually sufficient.
6. Rinse sections in running tap water.
7. Proceed with immunohistochemistry protocol.

### Reagents Required but not Supplied

50 mM Tris-buffered saline

Trypsin 250: Difco order code 0152-13 (available from Becton Dickinson).

Calcium chloride

1 M Sodium Hydroxide

*\* Trypsin containing chymotrypsin should always be used. The enzyme activities can vary from a supplier and between batches. Such variations may affect the incubation time required.*