Anti– human Vimentin Mouse Monoclonal Primary Antibody

Clone: OTI5C10

**Intended use**
Anti- human Vimentin (Clone: OTI5C10) Mouse Monoclonal Primary Antibody is intended for detection of Vimentin protein expression in frozen or formalin fixed human tissues and cells. The clinical interpretation of any positive staining or its absence should be complemented by morphological and histological studies with proper controls. Evaluations should be made within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist. The antibody is intended for *in vitro* diagnostic (IVD) use.

**Background**
This gene encodes a member of the intermediate filament family. Intermediate filaments, along with microtubules and actin microfilaments, make up the cytoskeleton. The protein encoded by this gene is responsible for maintaining cell shape, integrity of the cytoplasm, and stabilizing cytoskeletal interactions. It is also involved in the immune response, and controls the transport of low-density lipoprotein (LDL)-derived cholesterol from a lysosome to the site of esterification. It functions as an organizer of a number of critical proteins involved in attachment, migration, and cell signaling. Mutations in this gene causes a dominant, pulverulent cataract.[provided by RefSeq, Jun 2009].

Alternative names: CTRCT30; HEL113

**Reagent provided**
Anti-human Vimentin Mouse Monoclonal Primary Antibody (Clone: OTI5C10) is provided in liquid form in 20mM Sodium phosphate, 150mM Sodium chloride, 0.2% BSA, 0.09% Sodium azide, pH 7.4. The isotype of the antibody is IgG1,k. The protein concentration is approximately 0.1 +/- 0.05 mg/mL.

For immunohistochemistry, the primary antibody may be used at a working dilution of 1:100 – 1:200 for formalin-fixed, paraffin-embedded human tissue. It can be dependent upon the detection system used. These are guidelines only, and optimal dilutions should be determined by the individual laboratory.

**Immunogen**
Full length human recombinant protein of human VIM (NP_003371) produced in E.coli.
Specificity
The specificity of the anti-human Vimentin Mouse Monoclonal Primary Antibody was established on known melanoma. The anti-human Vimentin presented no staining on human heart myocytes and human liver hepatocytes and positive staining on melanoma using immunohistochemical (IHC) test methods.

Materials Required but Not Supplied
Antibody diluent, HIER solution, Antibody detection kits, Chromogen, Staining reagents, negative and positive tissue control slides are not included.

Precautions
1. For use by trained professionals only.
2. This product contains sodium azide (NaN₃), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, NaN₃ may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
3. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
4. Unused reagents should be disposed of according to local, State, and Federal regulations.

Storage
Store at 2-8°C. Do not use the product past the expiration date indicated on the label. If reagents are stored under any other conditions, the end user must verify the acceptability of those conditions. There are no obvious signs to indicate instability of this product therefore, positive and negative controls should be run simultaneously with patient specimens.

Specimen Preparation
Paraffin Sections
Anti-human Vimentin Mouse Monoclonal Primary Antibody can be used on formalin-fixed, paraffin-embedded tissue sections at a working dilution of 1:100 to 1:200. Anti-human Vimentin Mouse Monoclonal Primary Antibody (Clone: OTI5C10) working dilution requires heat induced epitope retrieval (HIER) for 3 minutes using pressure chamber at 110°C for staining. We recommend using HIER Citrate solution pH 6.0, which showed optimal staining of anti-Vimentin antibody at a dilution of 1:200 on known melanoma. The dilutions are estimates; the actual staining results may vary due to reagents and detection protocols used. Validation of antibody performance and final protocol are the responsibility of the end user.

Staining procedure
Manual Staining Procedure
1. Deparaffinize slides.
2. Submerge slides in peroxidase quenching solution for ~10 minutes, then rinse 2x with dH₂O.
3. Heat Induced Epitope Retrieval is required for this antibody; Citrate solution (1), pH 6.0 at 110°C for 3 minutes.
4. Allow slides to cool down from step 3, rinse with distilled water, wash with PBS-T 3 times, 2 minutes each.
5. Apply serum blocking solution. [Optional]
6. Apply primary antibody and incubate for 30-60 minutes at room temperature. After incubation wash with PBS-T 3 times, 2 minutes each.
7. Apply secondary antibody and incubate according to the data sheet of the detection system. Wash with PBS-T 3 times, 2 minutes each.
8. Apply enzyme conjugate and incubate according to data sheet of detection system. Wash with PBS-T 3 times, 2 minutes each.
9. Apply chromogen and incubate 5-10 minutes and rinse with distilled water.

Staining interpretation
The cellular staining pattern for Anti-human Vimentin Mouse Monoclonal Primary Antibody is cytoplasmic.

Performance Characteristics
Predicted Staining in Normal Tissue/Cells
Human heart and human liver was shown to be negative for this antibody.

Predictive Staining in Tumor
Anti-human Vimentin Mouse Monoclonal (Clone: OTI5C10) produced cytoplasmic staining when screened on melanoma.

(1) Detergent should not be used in the HIER step — produces non specific background
Contact Information

SDIX LLC
111 Pencader Drive
Newark, Delaware 19702
USA
+1 302 456 6789
+1 800 544 8881 (USA)
www.SDIX.com

Product Complaint and/or Technical Support
techsupport@origene.com
+1 301 340 3188 (prompt 2)

Authorized Representative
Colin LeGood
Barnes Wallis House, 25 Barnes Wallis Road
Segensworth East, Hampshire PO15 5TT UK
Tel +44 (0) 1489 898640