

## **Product datasheet for TA700390**

#### OriGene Technologies, Inc.

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Vimentin (VIM) Biotinylated Mouse Monoclonal Detection Antibody (Biotin conjugated) [Clone ID: OTI7B10]

## **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI7B10
Applications: ELISA

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Full length human recombinant protein of human VIM (NP\_003371) produced in E.coli.

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.5mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Biotin

Predicted Protein Size: 53.5 kDa

Gene Name: vimentin

Database Link: NP 003371

Entrez Gene 7431 Human

P08670

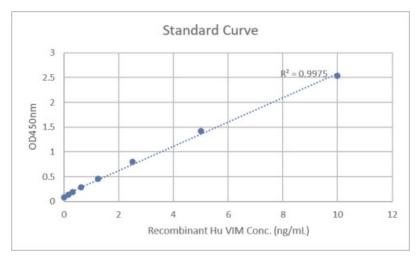


### Background:

Vimentin (VIM) is a structural protein that in humans is encoded by the VIM gene. A vimentin monomer has a central  $\alpha$ -helical domain, capped on each end by non-helical amino (head) and carboxyl (tail) domains. Two monomers are likely co-translationally expressed in a way that facilitates their formation of a coiled-coil dimer, which is the basic subunit of vimentin assembly. It is a type III intermediate filament (IF) protein that is expressed in mesenchymal cells. Intermediate filaments, along with tubulin-based microtubules and actin-based microfilaments, comprises the cytoskeleton. Vimentin is responsible for maintaining cell shape, integrity of the cytoplasm, and stabilizing cytoskeletal interactions. Since vimentin is the major cytoskeletal component of mesenchymal cells, it is often used as a marker of mesenchymally-derived cells or cells undergoing an epithelial-to-mesenchymal transition during both normal development and metastatic progression. Vimentin has been used as an immunohistochemical tumor marker of sarcoma, renal cell carcinoma, endometrial cancer, lung carcinoma, lymphoma, leukemia, and melanoma.

**Protein Families:** ES Cell Differentiation/IPS

# **Product images:**



Vimentin ELISA with 5C10 Capture ([TA600392]) and 7B10 Detection (TA700390) Antibodies. Standard protein used: Recombinant Human Vimentin (HEK293T expressed protein Cat# [TP301546])