

## Product Datasheet

### Vimentin Antibody (orb44570)

<b>Catalog Number</b>	orb44570
<b>Category</b>	Antibodies
<b>Description</b>	Mouse monoclonal antibody to Vimentin
<b>Target</b>	Vimentin
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse IgM
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Mammal
<b>Concentration</b>	1 mg/ml
<b>Buffer/Preservatives</b>	Tris buffered saline (TBS), pH 8.0, 15 mM sodium azide
<b>Purification</b>	Purified by sequential steps of physicochemical fractionation (differential precipitation and solid-phase chromatography methods).
<b>Immunogen</b>	Pellet of porcine brain cold stable proteins after depolymerization of microtubules.
<b>UniProt ID</b>	<b>P08670</b>
<b>RRID</b>	AB_10997622
<b>Tested applications</b>	FC, ICC, IHC-P, WB

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

**Biorbyt LLC**

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

**Application notes**

Immunocytochemistry: Staining technique: (a) fix cells for 10 min in methanol at -20°C and for 6 min in acetone at -20°C; (b) fix cells directly in methanol for 10 min at -20°C or in acetone for 10 min at -20°C. Positive control: 3T3 murine Swiss albino fibroblast cell line, RBL rat basophilic leukemia cell line. Flow cytometry: Recommended dilution: 1-5 µg/ml. Intracellular staining. Western blotting: Recommended dilution: 1 µg/ml.

**Specificity**

The antibody VI-01 reacts with vimentin, a 57 kDa intermediate filament intracellular protein expressed in variety of mesenchymal and mesodermal cell types. Cross-reactivity was found with smooth muscle desmin.

**Antibody Type**

Primary Antibody

**Clone Number**

VI-01

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Note**

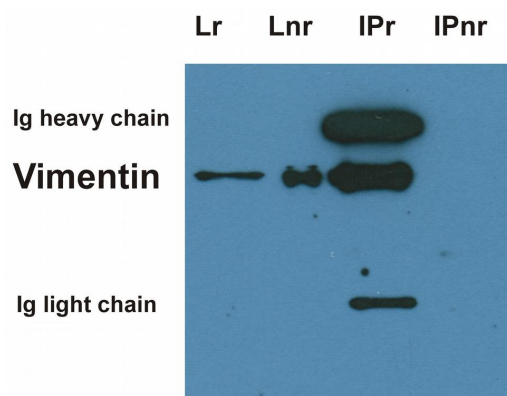
For research use only

**Entrez**

**7431**

**Expiration Date**

12 months from date of receipt.



Immunoprecipitation of vimentin from HeLa cell lysate by antibody VI-10 and its detection by antibody VI-01. IgM heavy chain (76-92 kDa) and IgM light chain (25-30 kDa) indicated. Mr of vimentin is 57 kDa. Lr = lysate (reducing conditions); Lnr = lysate (non-reducing conditions); IPr = immunoprecipitate (reducing conditions); IPnr = immunoprecipitate (non-reducing conditions).

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

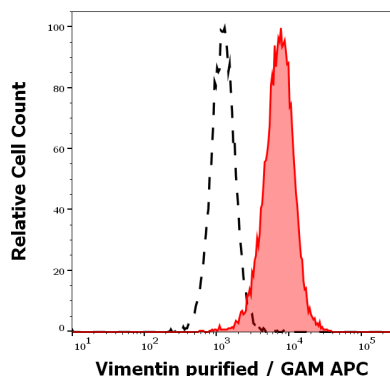
Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

**Biorbyt LLC**

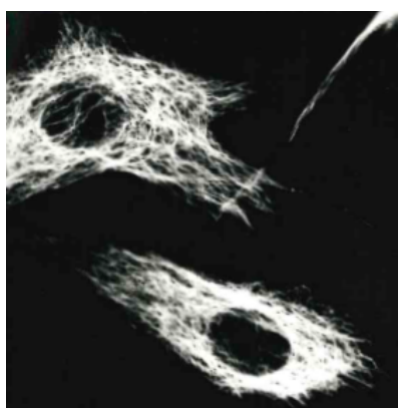
68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

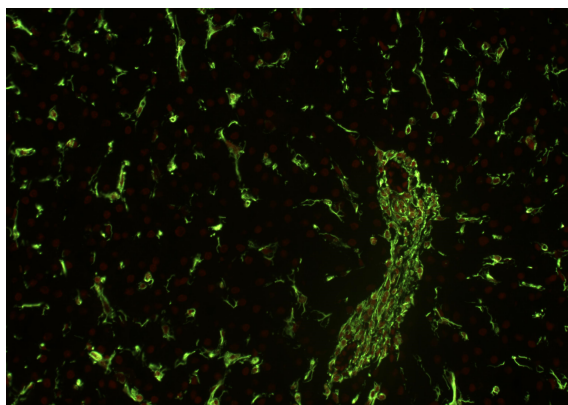
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558



Separation of HeLa cells stained using anti-Vimentin (VI-01) purified antibody (concentration in sample 5 µg/ml, GAM APC, red-filled) from HeLa cells unstained by primary antibody (GAM APC, black-dashed) in flow cytometry analysis (intracellular staining of methanol permeabilised cells).



Immunocytochemistry analysis of vimentin in methanol/acetone fixed murine 3T3 cells using mouse monoclonal antibody VI-01.



Immunohistochemistry staining (paraffin sections) of vimentin in human liver using mouse monoclonal antibody VI-01 (orb44570, diluted 1:400), detected with GAM IgM-Alexa Fluor®488 (diluted 1:200; green), cell nuclei stained with PI (1 µg/ml; orange).

**Biorbyt Ltd.**

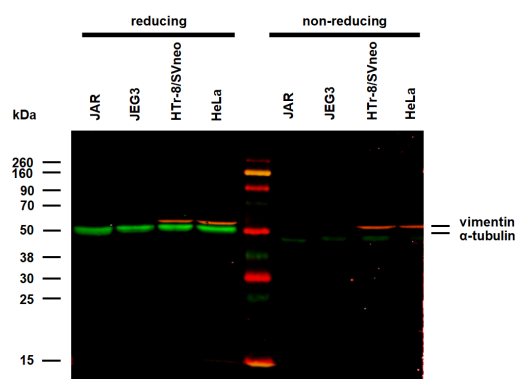
7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

**Biorbyt LLC**

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558



Anti-Vimentin Purified (VI-01) works in WB application under both reducing and non-reducing conditions. Western blotting analysis was performed on whole cell extracts (RIPA lysis buffer) of JAR, JEG3, HTr-8/SVneo, and HeLa cell lines mixed and heated (100°C, 5 min) with reducing (2-mercaptoethanol) or non-reducing SDS-loading buffer. Samples were resolved using 10% Tris-glycine SDS gel electrophoresis. Nitrocellulose membrane blot was probed simultaneously with mouse IgM monoclonal antibody VI-01 (1 µg/ml), and mouse IgG1 anti-tubulin monoclonal antibody TU-01 (1 µg/ml) used as the loading control. Subclass-specific secondary antibodies IRDye 800CW Goat-anti-Mouse IgG (green) and IRDye 680RD Goat-anti-Mouse IgM (red) were used for multiplex fluorescent Western blot detection. Vimentin was detected at ~55 kDa.

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

**Biorbyt LLC**

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)