

# Product Datasheet

## Endoglin/CD105 Antibody (E9)

### NBP1-42383

Unit Size: 0.05 mg

Store at 4C. Do not freeze.

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**NBP1-42383**

Endoglin/CD105 Antibody (E9)

| Product Information |                             |
|---------------------|-----------------------------|
| Unit Size           | 0.05 mg                     |
| Concentration       | 0.1 mg/ml                   |
| Storage             | Store at 4C. Do not freeze. |
| Clonality           | Monoclonal                  |
| Clone               | E9                          |
| Preservative        | 0.02% Sodium Azide          |
| Isotype             | IgG1                        |
| Purity              | Protein A or G purified     |
| Buffer              | PBS containing 0.1% BSA     |

| Product Description     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Gene ID                 | 2022                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Gene Symbol             | ENG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Species                 | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Reactivity Notes        | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Marker                  | Neo-endothelial Cells Marker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Specificity/Sensitivity | The monoclonal antibody E9 reacts with Endoglin a 190 kDa homodimeric transmembrane glycoprotein composed of disulfide-linked subunits. The external domain binds TGF-beta1 and -beta3 isoforms with high affinity. Two different isoforms (L and S) of CD105 with capacity to bind TGF-beta have been characterized which differ in the amino acid composition of their cytoplasmic tails. Mutations in the gene encoding endoglin have been linked to the human disease hereditary hemorrhagic telangiectasia type 1 (HHT1) a vascular disorder characterized by localized vascular dysplasia and a tendency towards arteriovenous malformations. Mice expressing a single CD105 allele develop external signs of disease similar to human HHT1, supporting the haploinsufficiency model for HHT1. Mice lacking endoglin die from defective angiogenesis characterized by failure of vascular smooth muscle investment of embryonic blood vessels, suggesting a defect in vascular smooth muscle cell development. Microvessel density (MVD) has been reported to be an independent prognostic indicator of outcome in a variety of human malignancies, with increased MVD correlating with shorter overall and relapse-free survival rates. The MVD counts using anti-CD105 antibody significantly correlated with overall and disease-free survival. Anti-CD105 monoclonal antibody E9 and anti-CD34 monoclonal antibody have been successfully used to quantify MVD in human breast carcinoma |
| Immunogen               | The antibody reacts with the CD105 antigen.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Product Application Details |                                                                                                                                                                                    |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Applications                | Western Blot, ELISA, Flow Cytometry, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation                                                                        |
| Recommended Dilutions       | Western Blot 1:100-1:2000, Flow Cytometry 1:10-1:1000, ELISA 1:100-1:2000, Immunohistochemistry 1:10-1:500, Immunoprecipitation 1:10-1:500, Immunohistochemistry-Frozen 1:10-1:500 |



## Application Notes

The monoclonal antibody E9 can be used for immunohistology on frozen sections, immuno assays as coating and detection, immuno precipitation, Western blotting and flow cytometry. Antibody E9 cannot be used for immunohistology on paraffin sections and for flow cytometry and Western blotting dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.



### Novus Biologicals USA

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA

Phone: 303.730.1950

Toll Free: 1.888.506.6887

Fax: 303.730.1966

[nb-customerservice@bio-techne.com](mailto:nb-customerservice@bio-techne.com)

### Bio-Techne Canada

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada

Phone: 905.827.6400

Toll Free: 855.668.8722

Fax: 905.827.6402

[canada.inquires@bio-techne.com](mailto:canada.inquires@bio-techne.com)

### Bio-Techne Ltd

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom

Phone: (44) (0) 1235 529449

Free Phone: 0800 37 34 15

Fax: (44) (0) 1235 533420

[info.EMEA@bio-techne.com](mailto:info.EMEA@bio-techne.com)

### General Contact Information

[www.novusbio.com](http://www.novusbio.com)

Technical Support: [nb-technical@bio-techne.com](mailto:nb-technical@bio-techne.com)

Orders: [nb-customerservice@bio-techne.com](mailto:nb-customerservice@bio-techne.com)

General: [novus@novusbio.com](mailto:novus@novusbio.com)

### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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