

# Product Datasheet

## **PD-ECGF/Thymidine Phosphorylase Antibody (SPM322)** **[Alexa Fluor® 405]** **NBP2-54403AF405**

Unit Size: 100 ul

Store at 4C in the dark.

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**NBP2-54403AF405**

PD-ECGF/Thymidine Phosphorylase Antibody (SPM322) [Alexa Fluor® 405]

| Product Information     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Unit Size               | 100 ul                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Concentration           | Please see the vial label for concentration. If unlisted please contact technical services.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Storage                 | Store at 4C in the dark.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Clonality               | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Clone                   | SPM322                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Preservative            | 0.05% Sodium Azide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Isotype                 | IgG1 Kappa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Conjugate               | Alexa Fluor 405                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Purity                  | Protein A or G purified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Buffer                  | 50mM Sodium Borate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Product Description     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Host                    | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Gene ID                 | 1890                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Gene Symbol             | TYMP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Species                 | Human, Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Marker                  | Angiogenesis Marker                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Specificity/Sensitivity | Recognizes a protein (amino acid 482) of 55kDa (in vivo 110kDa homodimer), identified as platelet-derived endothelial growth factor (PD-ECGF), same as thymidine phosphorylase (TP) or gliostatin. In the presence of inorganic orthophosphate, it catalyzes the reversible phospholytic cleavage of thymidine and deoxyuridine to their corresponding bases and 2-deoxyribose-1-phosphate. It is both chemotactic and mitogenic for endothelial cells and a non-heparin binding angiogenic factor present in platelets. Its enzymatic activity is crucial for angiogenic activity (metabolite is angiogenic). Higher levels of serum TP/PD-ECGF are observed in cancer patients. It is also involved in transformation of fluoropyrimidines, cytotoxic agents used in the treatment of a variety of malignancies, into active cytotoxic metabolites (e.g. 5-deoxy-5-fluorouridine to 5-FU). High intra-cellular levels of TP/PD-ECGF are associated with increased chemosensitivity to such antimetabolites. |
| Immunogen               | Recombinant full-length human PD-ECGF/Thymidine Phosphorylase protein (Uniprot: P19971)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |



|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| <b>Product Application Details</b> |                                                                                        |
|------------------------------------|----------------------------------------------------------------------------------------|
| <b>Applications</b>                | Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation |
| <b>Recommended Dilutions</b>       | Western Blot, Immunohistochemistry, Immunoprecipitation, Immunohistochemistry-Paraffin |
| <b>Application Notes</b>           | Optimal dilution of this antibody should be experimentally determined.                 |



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### **Products Related to NBP2-54403AF405**

|               |                                                             |
|---------------|-------------------------------------------------------------|
| IC002V        | Mouse IgG1 Isotype Control (11711) [Alexa Fluor® 405]       |
| NBP2-55129PEP | PD-ECGF/Thymidine Phosphorylase Recombinant Protein Antigen |
| 210-TA-005    | TNF-alpha [Unconjugated]                                    |
| 229-PE-010/CF | PD-ECGF/Thymidine Phosphorylase [Unconjugated]              |

### **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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