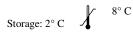


| Instructions For Use | | | |
|--------------------------|-------------|-------------|--|
| RA0327-C.5-IFU-RUO | | | |
| Rev. Date: Dec. 16, 2014 | Revision: 1 | Page 1 of 2 | |

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Thymidylate Synthase (5-FU Resistance Marker); Clone TMS715 (Concentrate)

| Availability/Contents: | <u>ltem #</u> RA0327-C.5 | <u>Volume</u> 0.5 ml | |
|--|--|--|--|
| Description: | | | |
| Species: Immunogen: Clone: Isotype: Entrez Gene ID: Hu Chromosome Loc.: | Mouse Recombinant human thyn TMS715 IgG1, kappa 7298 (Human) 18p11.32 | | |
| Synonyms: Mol. Weight of Antigen: | dTMP synthase, TMS, TS, TSase, TYMS protein, Tyms thymidylate synthetase 36kDa | | |
| Format: | 200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. | | |
| Specificity: | This antibody recognizes a protein of 36kDa, identified as Thymidylate Synthase (TS) (EC 2.1.1.45). | | |
| Background: | TS converts deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTMP), which is essential for DNA biosynthesis. TS is also a critical target for the fluoropyrimidines, an important group of antineoplastic drugs that are widely used in the treatment of solid tumors. Both 5-FU and fluorodeoxyuridine are converted in tumor cells to FdUMP which inactivates TS by formation of a ternary covalent complex in the presence of the folate cofactor 5,10-methylenetetrahydrofolate. Expression of TS protein is associated with response to 5-fluorouracil (5-FU) in human colorectal, gastric, head and neck, and breast carcinomas. | | |
| Species Reactivity: | Human. Others not known. | | |
| Positive Control: | 5-FU-resistant colon carcinoma cell lines (NCI H630R10, NCI H630R1), 5-FU-resistant breast cancer cell lines, MCF-Ad5 and MCF-Ad10. Colorectal, gastric, head & neck, and breast carcinomas. | | |
| Cellular Localization: Titer/ Working Dilution: | Cytoplasmic Immunohistochemistry (F Flow Cytometry: Immunofluorescence: Western Blotting: Immunoprecipitation: | rozen and Formalin-fixed): 0.5-1 μg/ml 0.5-1 μg/million cells 0.5-1 μg/ml 0.25-0.5 μg/ml 0.5-1 μg/500μg protein lysate | |
| Microbiological State: | This product is not sterile. | | |





ScyTek Laboratories, Inc. 205 South 600 West Logan, UT 84321 U.S.A.

CE

EC REP EmergoEurope (31)(0) 70 345-8570 Molsnstraat 15 2513 BH Hague, The Netherlands



Instructions For Use RA0327-C.5-IFU-RUO

Revision: 1

Rev. Date: Dec. 16, 2014

Page 2 of 2

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Uses/Limitations:

Not to be taken internally. For Research Use Only. This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy. Do not use if reagent becomes cloudy. Do not use past expiration date. Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com

Procedure:

- 1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- 2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- 3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

 Precautions:
 Contains Sodium Azide as a preservative (0.09% w/v).

 Do not pipette by mouth.
 Do not contact of reagents and specimens with skin and mucous membranes.

 Avoid contact of reagents and specimens or increased nonspecific staining may occur.
 This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

- 1. Johnston PG, et. al. Cancer Research, 1991, 51(24):6668-76.
- 2. Johnston PG, et. al. Cancer Research, 1992, 52(16):4306-12.
- 3. Johnston PG, et. al. Biochemical Pharmacology, 1993, 45(12):2483-6.
- 4. Johnston PG, et. al. Journal of Clinical Oncology, 1994, 12(12):2640-7.
- 5. Johnston PG, et. al. Cancer Research, 1995, 55(7):1407-12.
- 6. Johnston PG, et. al. Journal of the National Cancer Institute, 1997, 89(4):308-13.
- 7. Pestalozzi BC, et. al. Journal of Clinical Oncology, 1997, 15(5):1923-31.

Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

8° C Storage: 2° C



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