

Code No. 28135

**Anti-
OPRT Rabbit IgG Affinity Purify**Volume : 100 µg

Introduction : Thymidylate synthase/TS (EC 2.1.1.45), Dihydropyrimidine dehydrogenase/DPD (EC 1.3.1.2), Thymidine phosphorylase/TP (EC 2.4.2.4) and Orotate phosphoribosyl transferase/OPRT (EC 2.4.2.10) are known as key enzymes related to nucleic-acid metabolism within the body.

These enzymes are also known to be related to activation, metabolism and catabolism of 5-FU (5-fluorouracil) which is a metabolic antagonist being widely used for solid cancers including digestive system cancer and breast cancer as an anticancer drug. And there are some reports regarding correlation between the enzymes and the effects of 5-FU-based anticancer drugs. Additionally, TS and DPD have been reported to be prognostification-related factors of individuals who suffer cancers.

As seen above, this antibody is useful for researches of nucleic acid and expression of those proteins in cancer tissues including effect prediction of 5-FU-based anticancer drugs and searching for prognostification factors.

Antigen : Synthetic peptide of a part of Human OPRT
(ISAADRLEAAEMYRKAWEAY: 454-474)

Purification : Purified with antigen peptide

Form : Lyophilized product in PBS containing 1 % BSA and 0.05 % NaN₃

How to use : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

Stability : Lyophilized product, 5 years at 2 – 8 °C
: Solution, 2 years at –20 °C

Application : This antibody can be used for immunohistochemistry with formalin fixed paraffin embedded tissues after heat-induced antigen retrieval (for 40 minutes at 95 - 99°C, in Tris-buffer contains EDTA, pH 9.0 or EDTA solution, pH 8.0). The 2-step polymer systems are applicable (primary incubation: for 60 minutes at room temperature). The optimal dilution of this antibody is x100 (about 1 µg/mL), however, conditions should be optimized by each laboratory.

: This antibody can be used for western blotting in concentration about 1 µg/mL.

Reference : Sakamoto K, Sugimoto Y, Miyadera K, Oka T, Fukushima M. [Preparation of anti-OPRT antibody for immunochemical detection]. *Gan To Kagaku Ryoho*. 2005 May;32(5):653-8. *in Japanese*

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