IBL Data Sheet

Code No. 28001

Anti-Rat
C-ERC/Mesothelin (306) Rabbit IgG Affinity Purify

Volume : 100 µg

Introduction : *Erc* has been identified as a gene showing stronger expression in cancer-affected renal cell than in normal renal tissue in Eker rats (a rat model of renal cancer). The human homologue of the protein encoded by this gene is called MPF (megakaryocyte potentiating factor) or mesothelin. This protein is detected especially prominently in mesothelial cells, and its involvement has been suggested in the development of mesothelioma, making it a promising tumor marker. In humans, involvement of this protein has also been suggested in the development of pancreatic, ovarian and pulmonary cancers, etc. The protein is expressed as a GPI anchor-type membranous protein (about 71 kDa in molecular weight), which is thought to be digested by a furin-like protease to yield fragments about 31 kDa and 40 kDa in size.
We have prepared an antibody specific to C-ERC/Mesothelin (40 kDa fragment). This antibody specifically recognizes rat C-ERC/Mesothelin which is applicable for the analysis of ERC expression in mesothelial cells, tumors, cell lines, etc.

Antigen : Synthetic peptide of the part of Rat C-ERC/Mesothelin (GKEPNVVDENLIFYQNWELEA)

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN_3

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 stained in formalin fixed paraffin embedded tissues by several immunohistochemical techniques such as Avidin Biotin Complex (ABC) Method. The optimal dilution is 0.05 - 5 µg/mL. (In the case of pancreatic tissues, lower concentration is recommended as they tend to present non-specific staining)
: This antibody can be used for western blotting in concentration of 0.05 - 2 µg /mL.

Reference :

1. Hino O, Kobayashi E, Nishizawa M, Kubo Y, Kobayashi T, Hirayama Y, Takai S, Kikuchi Y, Tsuchiya H, Orimoto K, et al. Renal carcinogenesis in the Eker rat.J Cancer Res Clin Oncol. 1995;121(9-10):602-5.
2. Chang K, Pastan I. Molecular cloning of mesothelin, a differentiation antigen present on mesothelium, mesotheliomas, and ovarian cancers. Proc Natl Acad Sci U S A. 1996 Jan 9;93(1):136-40.
3. Yamashita Y, Yokoyama M, Kobayashi E, Takai S, Hino O. Mapping and determination of the cDNA sequence of the Erc gene preferentially expressed in renal cell carcinoma in the Tsc2 gene mutant (Eker) rat model. Biochem Biophys Res Commun. 2000 Aug 18;275(1):134-40.
4. Nakaishi M, Kajino K, Ikesue M, Hagiwara Y, Kuwahara M, Mitani H, Horikoshi-Sakuraba Y, Segawa T, Kon S, Maeda M, Wang T, Abe M, Yokoyama M, Hino O. Establishment of the enzyme-linked immunosorbent assay system to detect the amino terminal secretory form of rat Erc/Mesothelin.Cancer Sci. 2007 May;98(5):659-64.

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