

细胞质分裂付出蛋白 1 抗体

产品货号： mlR7110

英文名称： DOCK1

中文名称： 细胞质分裂付出蛋白 1 抗体

别名： 180 kDa protein downstream of CRK; Ced5; Dedicator of Cytokinesis 1; Dedicator of cytokinesis protein 1; DOCK 1; DOCK-1; DOCK 180; DOCK1; DOCK1_HUMAN; DOCK180.

研究领域： 肿瘤 细胞生物 信号转导 细胞凋亡 细胞自噬 G 蛋白信号

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Dog, Cow, Horse, Sheep,

产品应用： ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 (石蜡切片需做抗原修复)

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量：215kDa

细胞定位：细胞浆 细胞膜

性状：Lyophilized or Liquid

浓度：1mg/ml

免疫原：KLH conjugated synthetic peptide derived from human DOCK1:465-550/1865

亚型：IgG

纯化方法：affinity purified by Protein A

储存液：0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件：Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed：PubMed

产品介绍：Involved in cytoskeletal rearrangements required for phagocytosis of apoptotic cells and cell motility. Functions as a guanine nucleotide exchange factor (GEF), which activates Rac Rho small GTPases by

exchanging bound GDP for free GTP. Its GEF activity may be enhanced by ELMO1.

Tissue specificity: Highly expressed in placenta, lung, kidney, pancreas and ovary. Expressed at intermediate level in thymus, testes and colon.

Function:

Involved in cytoskeletal rearrangements required for phagocytosis of apoptotic cells and cell motility. Functions as a guanine nucleotide exchange factor (GEF), which activates Rac Rho small GTPases by exchanging bound GDP for free GTP. Its GEF activity may be enhanced by ELMO1.

Subunit:

Interacts with the SH3 domains of CRK and NCK2 via multiple sites. Interacts with nucleotide-free RAC1 via its DHR-2 domain. Interacts with ELMO1, ELMO2 and probably ELMO3 via its SH3 domain. Interacts with RAC1 and BAI1.

Subcellular Location:

Cytoplasm (Probable). Membrane (Probable). Note=Recruited to membranes via its interaction with phosphatidylinositol 3,4,5-trisphosphate (Probable).

Tissue Specificity:

Highly expressed in placenta, lung, kidney, pancreas and ovary. Expressed at intermediate level in thymus, testes and colon.

Similarity:

Belongs to the DOCK family.

Contains 1 DHR-1 domain.

Contains 1 DHR-2 domain.

Contains 1 SH3 domain.

SWISS:

Q14185

Gene ID:

1793

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

乳腺癌转移的新标记物 DOCK1

乳腺癌是一种常常发生转移的癌症。将近 90%的乳腺癌患者都因为癌症扩散而死，因此，理解这一危险过程的细胞和分子基础机制是十分重要的。

近日，加拿大蒙特利尔临床研究所（Institut de recherches cliniques de Montreal, IRCM）的科学家在乳腺癌研究方面取得了一个重要的发现，他们确定了，一种名为 DOCK1 的蛋白质可以作为潜在的靶标用于减少乳腺癌患者的癌转移。相关研究结果刊登在了近期出版的《PNAS》上。

研究人员在乳腺癌治疗方面尽管已经取得了重要的进展，但是对于癌症扩散的机制却知之甚少。科学家正在试图确定能够调节癌转移过程的蛋白质，因为它们或许可以作为新的药物靶标，并与现有的方法相结合促进治疗的效果。

在这项研究中，2 个主要的癌症亚型——HER-2+型和 Basal-like 型，很容易转移和复发，并最终导致患者的低生存率。该调查以 HER-2+(人类表皮生长因子受体 2)型为研究对象，这代表了大约 25%的乳腺癌病例。HER2 阳性肿瘤比其它类型的肿瘤更倾向于快速的发展和扩散。

研究人员解释到，通过研究 HER2+乳腺癌小鼠模型，确定了 DOCK1 蛋白质是癌转移的一个重要的调控因子。当去除了小鼠中的这一蛋白质后，乳腺癌的肺转移大大减少了。此外，研究发现 DOCK1 蛋白质有助于肿瘤的生长。

为了证明 DOCK1 的表达与乳腺癌预后之间的关系，研究人员对包含患者基因信息的几个数据库进行了分析。结果发现，在 HER-2+型或 Basal-like 型乳腺癌中，高水平的 DOCK1 与较差的预后以及疾病的复发有关。

产品图片

