Active Motility Related Protein (MRP1)

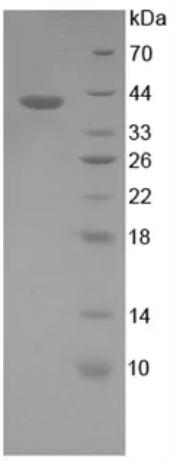
Catalog#:PEH12605

概述（Summary）

别称（Alternative Names）	CD9; TSPAN29; 5H9; BA2; BTCC-1; DRAP-27; GIG2; MIC3; P24; Tetraspanin 29; Cell growth-inhibiting gene 2 protein; Leukocyte antigen MIC3
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ser112-Ile195】
Accession #	P21926
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	39.7 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Integral membrane protein associated with integrins, which regulates different processes, such as sperm-egg fusion, platelet activation and aggregation, and cell adhesion. Present at the cell surface of oocytes and plays a key role in sperm-egg fusion, possibly by organizing multiprotein complexes and the morphology of the membrane required for the fusion. In myoblasts, associates with CD81 and PTGFRN and inhibits myotube fusion during muscle regeneration. In macrophages, associates with CD81 and beta-1 and beta-2 integrins, and prevents macrophage fusion into multinucleated giant cells specialized in

ingesting complement-opsonized large particles. Also prevents the fusion between mononuclear cell progenitors into osteoclasts in charge of bone resorption. Acts as a receptor for PSG17. Involved in platelet activation and aggregation. Regulates paranodal junction formation. Involved in cell adhesion, cell motility and tumor metastasis.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

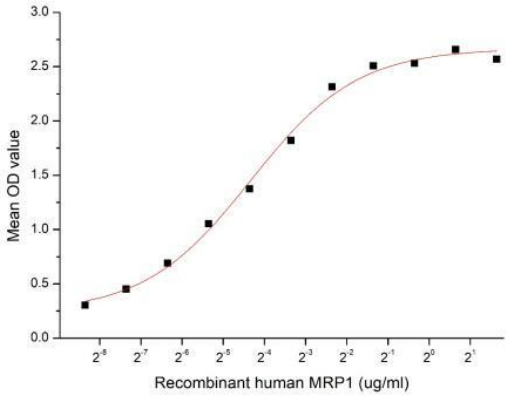


Figure 1. The binding activity of MRP1 and ITGb1

Motility Related Protein (MRP1) is a member of the superfamily of ATP-binding cassette (ABC) transporters. It can enable ATPase-coupled inorganic anion transmembrane transporter activity. Involved in anion transmembrane transport ; renal tubular secretion ; and response to toxic substance. It is an integral component of plasma membrane. Besides, ITGb1 has been identified as an interactor of MRP1, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human MRP1 and recombinant human ITGb1. Briefly, biotin-linked MRP1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100μl were then transferred to ITGb1-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μl stop solution to

the wells and read at 450nm immediately. The binding activity of MRP1 and ITGb1 was shown in Figure 1, the EC50 for this effect is 0.049 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.