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# Recombinant Human MMP-2/CLG4A protein (His Tag)

Catalog Number: PDEH100937

Note: Centrifuge before opening to ensure complete recovery of vial contents.

### **Description**

**Species** Human

Source E.coli-derived Human MMP-2 protein Lys36-Gly341, with an N-terminal His

Calculated MW 33.6 kDa Observed MW 40 kDa Accession P08253

**Bio-activity** Not validated for activity

## **Properties**

> 95% as determined by reducing SDS-PAGE. **Purity** 

Endotoxin < 10 EU/mg of the protein as determined by the LAL method

Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

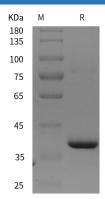
This product is provided as lyophilized powder which is shipped with ice packs. Shipping Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Formulation

Mannitol.

Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of

0.5 mg/mL. Concentration is measured by UV-Vis.

#### Data



> 95 % as determined by reducing SDS-PAGE.

#### Background

# Elabscience®

#### Elabscience Bionovation Inc.

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Matrix Metalloproteinase-2 (MMP-2) is an enzyme that degrades components of the extracellular matrix and thus plays a pivotal role in cell migration during physiological and pathological processes. MMP-2 expression is dependent on extracellular matrix metalloproteinase inducer (EMMPRIN), Her2/neu, growth factors, cytokines, and hormones. Pro-MMP-2 activation needs MT1-MMP and TIMP-2 contribution. MMP-2 is changed in distribution and increased in amount in the ventral cochlear nucleus after unilateral cochlear ablation. A low level of MMP-2 is linked to favorable prognosis in patients with a hormone receptor-negative tumor, usually associated with high risk. As a zymogen requiring proteolytic activation for catalytic activity, MMP-2 has been implicated broadly in the invasion and metastasis of many cancer model systems, including human breast cancer (HBC). Blocking MMP-2 secretion and activation during breast carcinoma development may decrease metastasis. The detection of active MMP-2 alone or the rate of pro-MMP-2 and active MMP-2 is considered a very sensitive indicator of cancer metastasis. Modulation of MMP-2 expression and activation through specific inhibitors and activators may thus provide a new mechanism for breast cancer treatment.

For Research Use Only

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