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Datasheet for ABIN7197002 TIMP2 Protein

Overview

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| Quantity: | 10 µg |
| Target: | TIMP2 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Biological Activity: | Active |

Product Details

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| Purpose: | Recombinant Human TIMP2/TIMP-2 Protein (Active) |
| Sequence: | Cys 27-Pro 220 |
| Characteristics: | A DNA sequence encoding the mature form of human TIMP2 (NP_003246.1) (Cys 27-Pro 220) was expressed and purified. |
| Purity: | > 96 % as determined by reducing SDS-PAGE. |
| Endotoxin Level: | < 1.0 EU per µg as determined by the LAL method. |
| Biological Activity Comment: | Measured by its ability to inhibit human MMP-2 cleavage of a fluorogenic peptide substrate MCA-PLGL-DPA-AR-NH ₂ (R&D Systems, Catalog # ES001). The IC ₅₀ value is < 4 nM. |

Target Details

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| Target: | TIMP2 |
| Alternative Name: | TIMP2/TIMP-2 (TIMP2 Products) |

Target Details

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| Background: | <p>Background: Tissue inhibitors of metalloproteinases (TIMP) family are natural inhibitors of the matrix metalloproteinases (MMPs), the zinc enzymes involved in extracellular matrix maintenance and remodeling. The TIMP family encompasses four members (TIMP1-4), and they inhibit most MMPs by forming non-covalent binary complex. TIMP2 is a 22 kDa non N-glycosylated protein expressed by a variety of cell types, and plays a unique role among TIMP family members owing to its functions to regulate cellular responses to growth factors. Findings establish an unexpected, MMP-independent mechanism for TIMP2 inhibition of endothelial cell proliferation in vitro and reveal an important component of the antiangiogenic effect of TIMP2 in vivo. TIMP-2 thus is critical to the maintenance of tissue homeostasis and is involved in the regulation of tumor microenvironment.</p> <p>Synonym: Metalloproteinase Inhibitor 2, CSC-21K, Tissue Inhibitor of Metalloproteinases 2,CSC-21K,DDC8</p> |
| Molecular Weight: | 22 kDa |
| NCBI Accession: | NP_003246 |
| Pathways: | cAMP Metabolic Process |

Application Details

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| Restrictions: | For Research Use only |
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Handling

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| Format: | Lyophilized |
| Reconstitution: | Please refer to the printed manual for detailed information. |
| Buffer: | Lyophilized from sterile PBS, pH 7.4 |
| Storage: | 4 °C,-20 °C,-80 °C |
| Storage Comment: | <p>Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.</p> <p>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.</p> |