



Product Datasheet

Product Name	C-terminal hemopexin-like domain of MMP-2 Human Recombinant
Cata No	CB500981
Source	<i>Escherichia Coli.</i>
Synonyms	C-terminal hemopexin-like domain of MMP-2, PEX.

Description

Recombinant Human PEX (C-terminal hemopexin-like domain of MMP-2) is a noncatalytic Metalloproteinase Fragment with Integrin Binding Activity and can inhibit cell associated collagenolytic activity both in vitro and in vivo.

Moreover, PEX can block angiogenesis and tumor growth in vivo, providing a potentially novel therapeutic approach for diseases associated with neovascularization. The appearance of PEX at sites of neovascularization may not only control normal angiogenesis, but when administered in sufficient quantities, may provide a naturally-occurring therapeutic inhibitor of diseases associated with angiogenesis. PEX mediates interaction with inhibitors and the cell surface, and is vital for activation. PEX is composed of 4 sub-domains arranged as a 4-bladed propeller.

PEX, which interferes with the cell membrane activation of MMP-2, reduced Rac1- promoted cell invasiveness as observed by collagen invasion assay. It has also been described that PEX prevents binding of MMP-2 to the integrin avb3.

PEX Human Recombinant is expressed as inclusion bodies in E.coli having a molecular mass of 28,453 Dalton and subsequently refolded in vitro to get biological activity.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein was lyophilized with 2mM Tris pH-7.4.

Reconstitution

It is recommended to reconstitute the PEX in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions

Stability

Lyophilized PEX although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution PEX should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

The bioactivity was measured by HMEC cell line, PEX can inhibit the transmembrane activity of HMEC under the stimulation of VEGF.

Sequence

MGLEHSQDPG ALMAPIYTYT KNFRLSQQDI
KGIQELYGAS PDIDLGTGPT PTLGPVTPEI
CKQDIVFDGI AQIRGEIFFF KDRFIWRTVT
PRDKPMGPLL VATFWPELPE KIDAVYEAPQ
EEKAVFFAGN EYWIYSASTL ERGYPKPLTS
LGLPPDVQRV DAAFNWSKNK KTYIFAGDKF

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WRYNEVKKKM DPGFKLIAD AWNAIPDNLD
AVVDLQGGGH SYFFKGAYYL KLENQSLKSV

KFGSIKSDWL GC

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