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ProductInformation

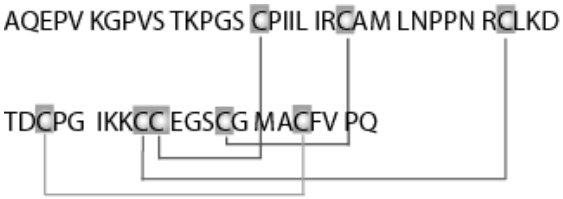
Elafin
human, recombinant,
expressed in *Saccharomyces cerevisiae*

Product Code **E 7280**
Storage Temperature 0 to –20 °C

Synonyms: elastase-specific inhibitor; skin-derived antileukoprotease

Product Description

Peptide Sequence:[1]



Calculated Molecular Masses:
Average Molecular Mass is 5999.20 Da
Monoisotopic Molecular Mass is 5994.8158 Da

Isoelectric Point (pI): 9.7

Elafin is a peptide found in the human epithelia. It is a reversible, tightly binding inhibitor of human leukocyte elastase and proteinase 3.

$K_i = 1.7 \times 10^{-10}$ M for human leukocyte elastase[2]
$K_i = 4.2 \times 10^{-10}$ M for human proteinase 3[3]

Elafin is produced in human skin, lungs, and mammary glands. It may affect the inflammation process and protect cells against destruction by the immune system. Elafin has shown potential applications for the treatment of cardiac infarction and organ rejection, as well as for treatment of seriously injured tissues and inflammatory lung diseases.[4]

Precautions and Disclaimer

This product is for laboratory research use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Stock solutions of Elafin may be prepared in water. Subsequent dilutions should be made into aqueous buffers, pH 4.0-8.0.

Storage/Stability

This product ships at ambient temperature and storage at 0 to –20 °C is recommended. Stock solutions should be stored at –20 °C. Avoid repeated freezing and thawing.

References

1. Wiedow, O., et. al., J. Biol. Chem., **266**, 3356 (1991).
2. Ying, Q.L., et. al., Biochemistry, **32**, 1866 (1991).
3. Ying, Q.L., et. al., A. J. Respir. Cell. Mol. Biol., **24**, 83 (2001).
4. Sallenave, J.M., Respir. Res., **1**, 87-92 (2000).

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