SYMANSIS
CELL SIGNALING SCIENCE

Product Data Sheet

human cell expressed IL-8^{HCX}

Source	A DNA sequence encoding the human IL-8 protein sequence (containing the signal peptide sequence, and the mature IL-8 sequence) was expressed in modified human 293 cells.
Molecular Mass	Symansis IL-8^{HCX} migrates as a band at approximately 6-8 kDa in SDS-PAGE. This compares with unmodified IL-8 that has a predicted molecular mass of 8.4 kDa.
pI	IL-8^{HCX} has a predicted pI of 9.02
Purity	>95%, as determined by SDS-PAGE and visualized by silver stain.
Formulation	When reconstituted in 0.5 ml sterile phosphate-buffered saline, the solution will contain 1% human serum albumin (HSA) and 10% trehalose.
Reconstitution	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial.
Storage	Lyophilized products should be stored at 2 to 8°C. Following reconstitution short-term storage at 4°C is recommended and longer-term storage of aliquots at -18 to -20°C. Repeated freeze thawing is not recommended.
Background Information	IL-8 is a member of the chemokine family. Chemokines are small secreted molecules containing 4 conserved cysteine residues and 2 disulfide linkages. IL-8 is a member of the CXC family of chemokines and is also known as CXCL8. IL-8 is predominantly produced by monocytes, T cells, NK cells and neutrophils and its expression is induced by IL-1 and TNF, as well as bacterial and viral products. IL-8 promotes the migration of leukocytes including neutrophils, monocytes, T and B-lymphocytes and basophils to the site of an infection to facilitate an immune response. Additionally, IL-8 promotes the adhesion and transmigration of neutrophils across the endothelium into tissues. IL-8 also exhibits chemotactic properties for non-leukocyte cell types such as keratinocytes, and smooth muscle cells as well as inducing the proliferation and chemotaxis of endothelial cells suggests it plays a role in angiogenesis. The role that IL-8 plays in the infiltration of neutrophils and angiogenesis suggests it may be involved in the pathogenesis of inflammatory diseases as well as tumor neovascularisation and progression. Several N-terminal processed forms of Il-8 are produced by proteolytic cleavage after secretion. In general, IL-8(1-77) is referred to as interleukin-8, with IL-8(6-77) being the most prominent form. For a recent review of the role of IL-8 in tumoral angiogenesis, please refer to Neuro-oncol. (2005): **7**(2).
Theoretical Sequence	SAKELRCQCIKTYSKPFHPKFIKELRVIESGPHCANTEIIVKLSDGRELCLDPKENWVQRVVEKFLKRAENS Sequence corresponds to IL-8(6-77) with the N-terminal confirmed by N-terminal sequencing