



**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

Store at +4C  
#7921

## SignalKine™ Human IL-8 Chemiluminescent Sandwich ELISA Kit

1 Kit ((96 assays) Low Volume Microplate)

**Species Cross Reactivity:** H  
**UniProt ID:** #P10145  
**Entrez-Gene Id:** #3576

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Product Includes	Product #	Quantity	Color	Storage Temp
ELISA Wash Buffer (20X)	9801	25 ml	Colorless	+4C
Luminol/Enhancer Solution	84850	3 ml	Colorless	RT
Stable Peroxide Buffer	42552	3 ml	Colorless	RT
Sealing Tape	54503	2 ea		+4C

### Description

SignalKine™ Human IL-8 Chemiluminescent Sandwich ELISA Kit from Cell Signaling Technology (CST) is a solid phase sandwich enzyme-linked immunosorbent assay (ELISA) that detects human IL-8 (hIL-8) in multiple matrices. Unknown samples being tested for hIL-8 and hIL-8 standards are added to low volume microwells, where the hIL-8 is captured by the coated hIL-8 Rabbit mAb. Following a washing step, a biotinylated hIL-8 Detection Rabbit mAb is added to detect the captured hIL-8. HRP-linked Streptavidin is then used for detection of the biotinylated hIL-8 Detection Rabbit mAb. A chemiluminescent reagent is added for signal development. The magnitude of light emission, measured in relative light units (RLU) is proportional to the quantity of human hIL-8 in the sample.

SignalKine™ Human IL-8 Chemiluminescent Sandwich ELISA Kit detects hIL-8 in multiple matrices that can be quantified by generating a standard curve with the recombinant hIL-8 protein standard provided. The hIL-8 standard range is from 13.7 to 10,000 pg/ml. Samples containing higher levels of hIL-8 can be diluted to fit into the standards range.

### Background

IL-8 is the prototypical CXC chemokine. It is best known for effects on neutrophils, specifically its ability to act as a chemoattractant and activate degranulation and respiratory burst (1-3). IL-8 is produced by a number of cell types, including monocytes, T cells, neutrophils, fibroblasts, endothelial cells, and others (1). In addition to its effects on neutrophils, IL-8 promotes angiogenesis, inhibits endothelial cell apoptosis, and promotes the proliferation of melanoma cells in an autocrine fashion (1). As a result, IL-8 may be a contributing factor to the development of certain cancers (1,2). There are two distinct G protein-coupled receptors for IL-8, CXCR1 and CXCR2 (1). Ligand binding induces Ca<sup>2+</sup> mobilization and activates the PI3K, PKC, Rho, and Rac pathways (1,3).

### Background References

1. Payne, A.S. and Cornelius, L.A. (2002) *J Invest Dermatol* 118, 915-22.
2. Brat, D.J. et al. (2005) *Neuro Oncol* 7, 122-33.
3. Mukaida, N. (2003) *Am J Physiol Lung Cell Mol Physiol* 284, L566-77.

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Revision 1

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