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Product Data Sheet

human cell expressed IL-10^{HCX}

Source	A DNA sequence encoding the human IL-10 protein sequence (containing the signal peptide sequence, and the mature human Interleukin 10 sequence) was expressed in modified human 293 cells.
Molecular Mass	Symansis IL-10^{HCX} migrates as a band between 10 and 20 kDa in SDS-PAGE due. This compares with predicted molecular mass of 18.6 kDa.
pI	Symansis IL-10^{HCX} separates into a number of isoforms with a pI between 3.0 and 9.0 in 2D PAGE due to post-translational modifications. This compares with the unmodified IL-10 that has a predicted pI of 7.63.
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	Interleukin 10 (IL-10) is a pleiotropic cytokine that regulates multiple immune responses through actions on T cells, B cells, macrophage/monocytes and antigen presenting cells (APC) and generally skews the immune response from TH1 to TH2. IL-10 may suppress immune responses by inhibiting expression of IL-1a, IL-1b, IL-6, IL-8, TNF-a, GM-CSF and G-CSF in activated monocytes and activated macrophages. IL-10 also suppresses IFN-γ production by NK cells. IL-10 is predominantly expressed in macrophages; however IL-10 expression has also been detected from activated T cells, B cells, mast cells, monocytes and keratinocytes. In addition to suppressing immune responses IL-10 also exhibits immuno-stimulatory properties, including stimulating the proliferation of IL-2 and IL-4 treated thymocytes and enhancing the viability of B cells and stimulating the expression of MHC class II For a recent review of the role of IL-10 activity on adaptive immunity-related cells, please refer to Mocellin *et al* (2004) *Cytokine Growth Factor Rev*. **15**(1):61-76.
Theoretical Sequence	SPGQGTQSENSCTHFPGNLPNMLRDLRDAFSRVKTFFQMKDQLDNLLLKESLLEDFKGYLG CQALSEMIQFYLEEVMPQAENQDPDIKAHVNSLGENLKTLRLRLRRCHRFLPCENKSKAVE QVKNAFNKLQEKGIYKAMSEFDIFINYIEAYMTMKIRN

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