Cytokines

Recombinant B18R Protein

B18R protein

Product Description
The B18R protein, which is encoded by the B18R open reading frame in the Western Reserve (WR) strain of vaccinia virus, is a type I interferon (IFN)-binding protein that is known to inhibit IFN antiviral response (Colamonici et al.). B18R protein has been shown to exhibit neutralizing activity to type I interferon family members (Meyers et al.) and to protect cells from the antiviral effects of interferon (Vancová et al.). It was recently shown that HIV-1-dependent induction of type I IFN activity and BAFF protein levels was abrogated by the soluble B18R protein, with no effect observed on the cell viability (Gomez et al.). B18R protein has been reported to aid in cellular reprogramming using RNA-mediated gene delivery (Warren et al.; Yoshioka N et al.).

Product Information

Alternative Names: Type I IFN inhibitor, Vaccinia virus-encoded neutralizing type I interferon receptor
Accession Number: D01019
Amino Acid Sequence: MTMKMVHYI FVSLLLLLFH SYAIDIENEI TEFFNKMRDT LPAKDSKWLN PACMFGGTMN DIAALGEPFS AKCPPIESL LSHRYKDYVV KWERLEKNRR RQVSNKRVKH GDLWIANYS KFSNRRYLV TTTKNDGVQ GIVRSHIRKP PSCIPKTYEL GTHDKGYIDL YCGILYAKHY NNITWYKDNK EINDDIKYMNNTWYKDNK EINDDIKYMNNTWYKDNK EINDDIKYN
Predicted Molecular Mass: 38.4 kDa
Species: Vaccinia virus
Cross Reactivity: Human, mouse, and cow type I IFN receptors
Formulation: Sterile filtered liquid containing phosphate and sodium chloride, pH 7.5.
Source: Insect cells

Specifications
Activity: The specific activity is ≥ 1.3 x 10^6 units/mg as determined by a neutralization assay of recombinant mouse IFN-alpha 2 protein.
Purity: ≥ 98%
Endotoxin Level: Measured by kinetic limulus amebocyte lysate (LAL) analysis and is ≤ 0.01 ng/μg protein.

Preparation and Storage

Storage: Store at -80°C.
Stability: Stable as supplied for 12 months from date of receipt.
Preparation: Thaw at room temperature (15 - 25°C). Once thawed, use immediately or aliquot and store at -80°C for up to 12 months from date of receipt. After thawing aliquots, use immediately. Do not re-freeze.
Related Products
For a complete list of cytokines, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/cytokines or contact us at techsupport@stemcell.com.

References