

Active Recombinant Vaccinia virus B19R Protein, His-tagged, Biotinylated

Cat. No. B8R-175 **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Vaccinia virus B19R(Lys18-Ser272) fused with His tag at C-terminal was expressed in CHO, Biotinylated.
Species	VACV
Source	CHO
ProteinLength	Lys18-Ser272
Description	B8R is a secreted Interferon gamma (IFN-gamma) binding protein encoded by the open reading frame of the Vaccinia virus (smallpox). B8R is a 43 kDa protein and shares only 19% amino acid sequence identity with the extracellular region of the human IFN-gamma Receptor 1 (IFN-gamma R1). However, B8R binds IFN-gamma orthologs from multiple species including human, rat, rabbit, bovine, and chicken with high affinity, but it binds mouse IFN-gamma with low affinity. During infection, virally-induced B8R binds and sequesters endogenous IFN-gamma, thereby suppressing the host immune response and promoting viral immune evasion. While B8R is not required for viral replication, it contributes significantly to Vaccinia virus virulence and is frequently inactivated prior to Vaccinia use in vaccines. IFN-gamma peptide mimetics that activate IFN-gamma R1 but are not bound and sequestered by B8R have been developed for research and therapeutic use.
Predicted N Terminal	Lys18

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Form	Lyophilized from a 0.2 µm filtered solution in PBS.
Bio-activity	Measured by its ability to inhibit rhIFN-gamma mediated protection of HeLa human cervical epithelial carcinoma cells to viral lysis. Meager, A. (1987) in Lymphokines and Interferons, a Practical Approach. Clemens, M.J. et al. (eds): IRL Press. 129. The ED50 for this effect is 0.5-3 ng/mL.
Molecular Mass	30 kDa (unlabeled)
Endotoxin	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE with silver staining
Notes	Structure / Form: Noncovalently-linked homodimer, biotinylated via sugars
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 250 µg/mL in PBS.
Conjugation	Biotin

GENE INFORMATION

Gene Name	B8R temporal expression: early [Vaccinia virus]
Official Symbol	B8R
Synonyms	B8R; temporal expression: early; soluble interferon-gamma receptor-like protein

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Gene ID	3707661
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UniProt ID	P24770
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