

herpesvirus 1 ICP47 protein (US12) Recombinant Protein | US12 recombinant protein

Recombinant Human herpesvirus 1 ICP47 protein (US12)

CATALOG # AAA18704	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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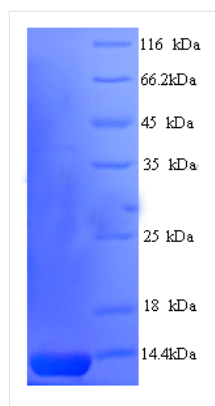
PRODUCT SYNONYMS

herpesvirus 1 ICP47 protein (US12); Recombinant Human herpesvirus 1 ICP47 protein (US12); Immediate-early protein IE12; Immediate-early-5; Infected cell protein 47; US12 protein; Vmw12; US12 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	1-88aa; Full Length
Sequence	MSWALEMADT FLDTMRVGPR TYADVREIN KRGREDREA RTAVHDPERP LLRSPGLLPE IAPNASLGVA HRRTG GTVTD SPRNPVTR
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for US12 recombinant protein

Plays a role in the inhibition of host immune response. Binds specifically to transporters associated with antigen processing (TAP), thereby blocking peptide-binding and translocation by TAP as well as subsequent loading of peptides onto MHC class I molecules. MHC I molecules are retained in the endoplasmic reticulum and ultimately directed to proteasomal degradation. In consequence, infected cells are masked for immune recognition by cytotoxic T-lymphocytes.

References

DNA sequence of an immediate-early gene (IE mRNA-5) of herpes simplex virus type 1. Watson R.J., Vande Woude G.F. *Nucleic Acids Res.* 10:979-991(1982) DNA sequence analysis of an immediate-early gene region of the herpes simplex virus type 1 genome (map coordinates 0.950 to 0.978) .Murchie M.-J., McGeoch D.J.J. *Gen. Virol.* 62:1-15(1982) A 3' co-terminal family of mRNAs from the herpes simplex virus type 1 short region two overlapping reading frames encode unrelated polypeptide one of which has highly reiterated amino acid sequence. Rixon F.J., McGeoch D.J. *Nucleic Acids Res.* 12:2473-2487(1984) Sequence determination and genetic content of the short unique region in the genome of herpes simplex virus type 1. McGeoch D.J., Dolan A., Donald S., Rixon F.J.J. *Mol. Biol.* 181:1-13(1985) The DNA sequences of the long repeat region and adjoining parts of the long unique region in the genome of herpes simplex virus type 1. Perry L.J., McGeoch D.J.J. *Gen. Virol.* 69:2831-2846(1988) Reiterated sequences within the intron of an immediate-early gene of herpes simplex virus type 1. Watson R.J., Umene K., Enquist L.W. *Nucleic Acids Res.* 9:4189-4199(1981) Herpes simplex virus type 1 (HSV-1) -induced retinitis following herpes simplex encephalitis indications for brain-to-eye transmission of HSV-1. Maertzdorf J., Van der Lelij A., Baarsma G.S., Osterhaus A.D.M.E., Verjans G.M.G.M. 3.3.CO;2-*Z>Ann. Neurol.* 48:936-939(2000) Herpes simplex virus type 1 transmission through corneal transplantation. Remeijer L., Maertzdorf J., Doornenbal P., Verjans G.M.G.M., Osterhaus A.D.M.E. *Lancet* 357:442-442(2001) A cytosolic herpes simplex virus protein inhibits antigen presentation to CD8+ T lymphocytes. York I.A., Roop C., Andrews D.W., Riddell S.R., Graham F.L., Johnson D.C. *Cell* 77:525-535(1994) A viral inhibitor of peptide transporters for antigen presentation. Frueh K., Ahn K., Djaballah H., Sempe P., van Endert P.M., Tampe R., Peterson P.A., Yang Y. *Nature* 375:415-418(1995) Molecular mechanism and species specificity of TAP inhibition by herpes simplex virus ICP47. Ahn K., Meyer T.H., Uebel S., Sempe P., Djaballah H., Yang Y., Peterson P.A., Frueh K., Tampe R. *EMBO J.* 15:3247-3255(1996) The active domain of the herpes simplex virus protein ICP47 a potent inhibitor of the transporter associated with antigen processing (TAP) . Neumann L., Kraas W., Uebel S., Jung G., Tampe R.J. *Mol. Biol.* 272:484-492(1997) Inhibition of antigen transport by expression of infected cell peptide 47 (ICP47) prevents cell surface expression of HLA in choriocarcinoma cell lines. Easterfield A.J., Austen B.M., Westwood O.M.R.J. *Reprod. Immunol.* 50:19-40(2001) Structure of the active domain of the herpes simplex virus protein ICP47 in water/sodium dodecyl sulfate solution determined by nuclear magnetic resonance spectroscopy. Pfander R., Neumann L., Zweckstetter M., Seger C., Holak T.A., Tampe R. *Biochemistry* 38:13692-13698(1999)

NCBI AND UNIPROT INFORMATION

NCBI GI #	820945303
NCBI GeneID	2703441
NCBI Accession #	YP_009137148.1
NCBI GenBank Nucleotide #	NC_001806.2
UniProt Accession #	P03170; Q99BW2; Q9E0N0; Q9E0N1
Molecular Weight	11.8 kDa
NCBI Official Full Name	TAP transporter inhibitor ICP47
NCBI Official Symbol	US12
NCBI Protein Information	inhibits antigen presentation; involved in immune regulation
UniProt Protein Name	ICP47 protein
UniProt Gene Name	US12
UniProt Entry Name	ICP47_HHV11

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/us12-recombinant-protein-e-coli/18704>