

B18R, Human Recombinant Carrier-Free

Recombinant Protein

Cat. # GF156

Lot # XXXXXX

FOR RESEARCH USE ONLY
NOT FOR USE IN DIAGNOSTIC PROCEDURES
NOT FOR HUMAN OR ANIMAL CONSUMPTION

pack size: 50 µg

Store at -80°C



Certificate of Analysis

page 1 of 2

Background

B18R is a virally-encoded protein that acts as a decoy receptor for Type 1 Interferons. B18R enables increased cell viability during RNA transfection protocols designed to convert human somatic donor cells into iPSCs via direct delivery of synthetic mRNA's. As a type I IFN receptor, B18R has a broad species specificity. It has high affinity for human IFN- α and also binds rabbit, bovine, rat, pig, and mouse IFN- α and IFN- β .

EMD Millipore's B18R protein can be used with the Simplicon™ RNA Reprogramming Technology (Catalog No. SCR550) to create "foot-print" free human iPS cells at the highest efficiency without unwanted RNA degradation caused by cellular IFN responses.

Source

Insect cells infected with baculovirus: amino acids His20-Glu 351 with a His-tag attached of Vaccinia Virus B18R.

Concentration

0.5 mg/mL

Molecular Mass

Product has a predicted molecular mass of 38,389. The DTT-reduced protein migrates as a 48 kDa polypeptide on SDS-PAGE due to glycosylation. The non-reduced protein migrates as a 46 kDa polypeptide on SDS-PAGE due to internal cystines.

Purity

Product is > 98%, as determined by SDS-PAGE.

Endotoxin

Product is < 0.05 ng/µg cytokine as determined by the LAL assay.

Presentation

Sterile liquid; 10 mM phosphate, 0.5 M NaCl, pH 7.5 buffer and is filtered with a 0.2µm filter before vialing.

Quality Control Assay

Bioactivity assay: The ND50 of this protein, as measured by neutralization of Mouse IFN α 2 Recombinant Protein, is ≤ 800 pg/mL in the presence of 1 ng/mL Mouse IFN α 2. This corresponds to a specific activity of $\geq 1.3 \times 10^6$ Units/mg.

Storage and Handling

For best recovery, quick-spin vial prior to opening. Thaw on ice. While on ice, aliquot B18R protein into sterile, nuclease-free, low protein-binding eppendorf tubes and store at -80°C. Limit repeated freeze and thaw cycle. Use in a sterile environment.

Further dilutions should be made into appropriate buffer or medium

Representative Data

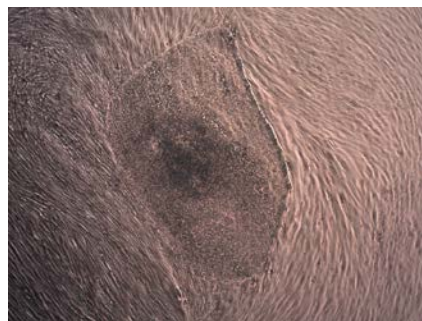


Figure 1. Human iPS cells generated using Simplicon™ RNA Reprogramming Kit (Catalog No. SCR550) and B18R protein. hiPS colonies at 26 days post-transfection.

SPECIES LEGEND: H Human Ca Canine M Mouse R Rat Rb Rabbit B Bovine P Porcine WR Most Common Vertebrates

upstate | CHEMICON | Linco

THE EXPERTISE OF UPSTATE®, CHEMICON® AND LINCO®
IS NOW A PART OF MILLIPORE

Please visit www.millipore.com for additional product information and references.

Submit your published journal article, and earn credit toward future purchases. Visit www.millipore.com/publicationrewards to learn more!

B18R, Human Recombinant Carrier-Free

Cat # GF156

Lot # XXXXXXXX

■ antibodies ■ Multiplex products ■ biotools ■ cell culture ■ enzymes ■ kits ■ proteins/peptides ■ siRNA/cDNA products

Please visit www.millipore.com for additional product information, test data and references

EMD Millipore Corporation, 28820 Single Oak Drive, Temecula, CA 92590, USA 1-800-437-7500

Technical Support: T: 1-800-MILLIPORE (1-800-645-5476) • F: 1-800-437-7502

FOR RESEARCH USE ONLY. Not for use in diagnostic procedures. Not for human or animal consumption. Purchase of this Product does not include any right to resell or transfer, either as a stand-alone product or as a component of another product. Any use of this Product for purposes other than research is strictly prohibited.

Millipore®, the M mark, Upstate®, Chemicon®, Linco® and all other trademarks, unless specifically identified above in the text as belonging to a third party, are owned by Merck KGaA, Darmstadt. Copyright ©2008-2014 Merck KGaA, Darmstadt. All rights reserved.



We Buy 100% Certified
Renewable Energy