Product Information

Isotype:	hIgG1/kappa
Expression System:	CHO cells
Concentration:	10.0 mg/ml as determined by UV280 assay
Purification:	Antibody was obtained from supernatant, Purification includes Protein A capture, low pH viral inactivation, anion exchange, ultradiafiltration, and nanofiltration
Purity:	About 95% as estimated by densitometric analysis of the Coomassie Blue-stained SDS-PAGE gel
Contents of monomers, fragments, dimers and polymers (SEC-HPLC):	99.86% monomers, fragments not detected 0.14% dimers
Endotoxin (LAL assay):	< 0.3 EU/ml
Storage and Handling:	Storage temperature at 2-8°C
Storage Buffer:	2 mM acetate, 10% maltose, 0.01% Tween10, pH6.6

Experimental Results

The recombinant plasmids encoding heavy chain and light chain of e137 was transiently transfected into suspension CHO cell cultures. The target antibody was produced under GMP using Protein A chromatography, followed by low pH incubation for viral inactivation, anion exchange chromatography for impurity removal, and ultradiafiltration for buffer exchange. The final product was filtered through nanofiltration for viral clearance. Purity was assessed by SDS-PAGE.

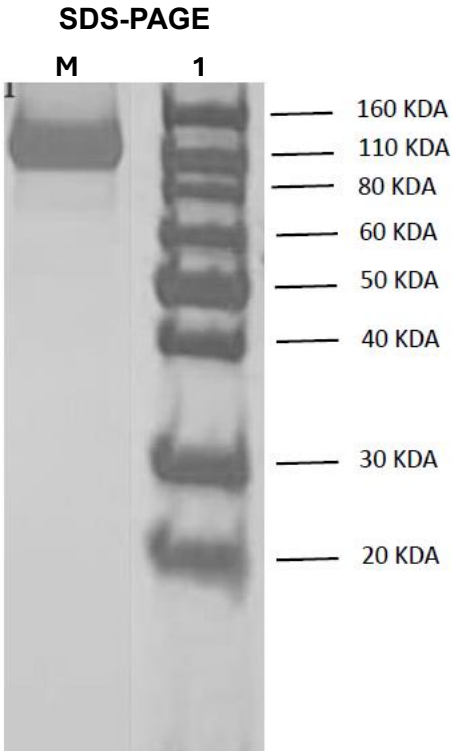

Figure 1. SDS-PAGE OF e137

Lane M: Protein Marker
Lane 1: Non-reducing conditions

Biological Activity

e137 **Neutralizing activity HCVpp 1a (H77):** IC_{50} = 0.03 µg/mL

e137 **Neutralizing activity HCVpp 1b (5.23):** IC_{50} = 0.9 µg/mL

e137 **Neutralizing activity HCVpp 2a (1.2):** IC_{50} = 1.6 µg/mL

e137 **Neutralizing activity HCVcc 2a (JFH1):** IC_{50} = <0.3 µg/mL

e137 **Neutralizing activity HCVpp 2b (1.7):** IC_{50} = 0.9 µg/mL

e137 **Neutralizing activity HCVpp 3a (4.28):** IC_{50} = 1 µg/mL

e137 **Neutralizing activity HCVpp 4 (21.6):** IC_{50} = 1.4 µg/mL

e137 **Neutralizing activity HCVpp 5 (16.11):** IC_{50} = 1 µg/mL

Publications

PMID: 23109015: Neutralization activity and kinetics of two broad-range human monoclonal IgG1 derived from recombinant Fab fragments and directed against Hepatitis C virus E2 glycoprotein

DOI: 10.1016/j.antiviral.2012.07.013: Anti-hepatitis C virus E2 (HCV/E2) glycoprotein monoclonal antibodies and neutralization interference

DOI: 10.1028/JVI.01986-07: Identification of a broadly cross-reacting and neutralizing human monoclonal antibody directed against the hepatitis C virus E2 protein