



Certificate of Origin

Date 22-September-2010

Product Name Cell Therapy Systems Recombinant Human Flt-3 Ligand

Catalog Number CTP9411, CTP9413

Lot Number Information applies to all lots produced.

Manufacturing Information Manufactured under ISO 13485 Quality Standard

Manufacturing Site Invitrogen, Camarillo, California, USA

Raw Material Information Recombinant human Flt-3 ligand is expressed in Human Embryonic Kidney 293 cells and purified via sequential chromatography. Cultures were grown in media that is serum free and free of animal origin products. The product does not utilize animal derived components in the manufacturing process.

Animal Derived Components: The protein is purified via sequential chromatography. The leader sequence is cleaved by recombinant Tobacco Etch Virus Protease manufactured in E. coli. The final purification step is heparin-sepharose chromatography. Heparin is derived from porcine tissue from China.

This document was prepared
by:

A handwritten signature in blue ink that reads "Eugene Montross".

Eugene Montross
Quality Assurance