

Certificate of Analysis

Product name/description:

Anti-Human Calpastatin, Monoclonal (Clone CSL1-5)

Code No: Size: 0.1 mg mouse Ig

Lot No: 004FDFZ

Storage Condition: 4 degrees C *

Expiration Date : June 2014 Country of origin : Japan

*: Shipping at below RT

Source:

Antibody:

Monoclonal antibody was produced from the established hybridoma obtained by fusing the mouse myeloma cell line P3U1 with spleen cells of BALB/c mouse after immunization with human calpastatin. The monoclonal antibody was harvested from ascitic fluid.

Bovine Serum Albumin (BSA):

The BSA was derived from bovine serum or plasma from US sourced cattle slaughtered at a USDA license establishment located in the US. The animal used was under 30 months of age that were not stunned using a penetrating device that injects air into the cranial cavity. All cattle received ante- and post mortem health inspections under a veterinarian's supervision at the abattoir and were apparently free from infections and contagious diseases and injurious parasites. At the time of manufacture of this lot of material, the US is classified as a country that is free from rinderpest, foot-and-mouth disease and contiguous bovine pleuropneumonia.

Quality Control:

The lyophilized antibody was dissolved in $50 \mu l$ of dH_2O . The antibody dilutions were applied for ELISA assay by colorimetric detection using a microtiter plate immobilized with A549 cell. The expected antibody titeration was obtained.

Manufacturing Control:

<u>Purification</u>: Antibody was purified by column chromatography, dissolved in 10 mM PBS, pH7.4, containing 1.0% bovine serum albumin, and then lyophilized.

The lyophilized antibody does not contain preservative.

<u>BSA treatment</u>: The BSA product has been subjected to an initial heat shock of bovine serum or plasma at 65 degrees C for 3 hours at pH around 5. The albumin is stabilized with caprylic acid. The harvested albumin is contacted with cold-solvent and recovered as a precipitate and further purified. The purified albumin is again stabilized with caprylate and heated just under 60 degrees C for 4 hours. This step is used to minimize the presence of proteolytic enzymes.

The above manufacturing processes contributed to the reduction of TSE or other infectious agents.

It is certified that this product meets above specifications.

Approved By:

Yoshiko Kubota Manager, Quality Assurance TAKARA BIO INC.

Safety Information:

Please refer to our website (*) for safety information :

(*)Japanese customers : http://www.takara-bio.co.jp
Other country's customers : http://www.takara-bio.us

Notice To Purchaser:

This product is intended to be used for research purpose only. They are not to be used for drug or diagnostic purposes, nor are they intended for human use. They shall not to be used products as food, cosmetics, or utensils, etc.

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Page | 2