

#### RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet

# **Recombinant Human Centromere Protein-A**

Catalog No. Source
228-10216 Sf9 insect cells.

# **Synonyms**

Histone H3-like centromeric protein A, Centromere protein A, CENP-A, Centromere autoantigen A, CENPA.

#### Introduction

Centromere proteins are a group of proteins which form and/or mediate the function of centromeres, the central structures of chromosomes to which spindle fibers/microtubuli attach and pull the chromosomes apart in cell division. Currently, 9 centromere proteins are known and designated CENPA to CENP-I. Most of the centromere proteins are targets of autoantibodies, the anti-centromere antibodies. CENPA is another important centromeric autoantigen in addition to CENPB: it has a molecular weight of approx. 20 kDa and is incorporated into centromeric chromatin due to its histone-like properties. CENPA antibodies are an important marker for correct diagnosis of Scleroderma / CREST syndrome in CENPB-autoantibody negative patients.

## Description

CENPA Human Recombinant produced in SF9 is a glycosylated, polypeptide chain having a molecular mass of 17,015 Dalton.

CENPA is expressed with a -6x His tag and purified by proprietary chromatographic techniques.

## Physical Appearance

Sterile Filtered liquid formulation.

#### **Formulation**

CENPA is supplied in 20mM HEPES buffer pH-8, 100mM sodium chloride, and 6M Urea. Immunological functions

- 1. Binds IgG-type human auto-antibodies.
- 2. Standard ELISA test (checker-board analysis of positive/negative sera panels including CDC international reference sera).



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## **Applications**

Western-Blot with monoclonal anti-hexa-His-tag antibody & Scleroderma patient sera. 0.15-0.4  $\mu$ g/ml (depending on the type of ELISA plate and coating buffer). Suitable for biotinylation and iodination.

## Storage Conditions

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Avoid multiple freeze-thaw cycles.

# **Purity**

Greater than 90% as determined by SDS-PAGE.