

# Certificate of Analysis



**Product name/Description:** RetroNectin® GMP grade  
**Cat. #:** T202  
**Lot #:** J2306  
**Storage Condition:** Store at or below -30 degrees C  
**Expiration Date:** July 26, 2026  
**Package Size:** 2.5 mg

**Product Documents:** Documents for Takara Bio products are available for download at [www.takara-bio.com](http://www.takara-bio.com)

## Quality Control Data:

| Test items                       | Specifications                         | Results                                |
|----------------------------------|--|--|
| Appearance                       | Clear and colorless                    | Clear and colorless                    |
| Identification                   |  |  |
| UV                               | 276 ~ 280 nm                           | 278 nm                                 |
| pH                               | 5.7 ~ 6.7                              | 6.1                                    |
| Molecular Weight                 | Pass the test                          | Pass                                   |
| Peptide mapping (LC/MS analysis) | Pass the test                          | Pass                                   |
| Purity                           |  |  |
| Chromatographic purity           | Not less than 90.0%                    | 100.0%                                 |
| Biological activity tests        |  |  |
| (1) C-domain binding activity    | Pass the test                          | Pass                                   |
| (2) CS1 binding activity         | Pass the test                          | Pass                                   |
| (3) Heparin binding activity     | Pass the test                          | Pass                                   |
| DNA content                      | Not more than<br>3.0 ng/mg protein     | Not more than<br>1.65 ng/mg protein    |
| Bacterial endotoxins             | Not more than<br>0.3 USP EU/mg protein | Not more than<br>0.1 USP EU/mg protein |
| Sterility                        | By the USP general method              | Pass                                   |
| Assay ( Lowry's method )         | 0.9 ~ 1.1 mg/mL                        | 1.03 mg/mL                             |

It is certified that this product meets above specifications.

Approved by :

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Manager, Quality Assurance  
TAKARA BIO INC.

**Limited Use Label License & Patent Marking:**

[ M69 ] This product can be used for the methods covered by the claims of Patent or PCT publication Nos. of US8728811, US8927273, JP5485139, US9238797, US8841126, US9670459, JP6283347, WO2017/094879, and its foreign counterpart patent claims.

**Safety Information :**

Please refer to our website for safety information :

<http://www.takara-bio.com>

**Notice To Purchaser :**

This product is not intended for human in vivo applications. It is the end user's responsibility to ensure that the final product meets the requirements of the application for which it is to be used.

This product may not be resold or transferred, modified for resale or transfer without written approval from TAKARA BIO INC.

If you require licenses for other use, please contact us by phone at +81 77 565 6973 or from our website.

<http://www.takara-bio.com>

Your use of this product is also subject to compliance with any applicable licensing requirements described on the product web page.

It is your responsibility to review, understand and adhere to any restrictions imposed by such statements.

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**Country of origin:**                      **Japan**