

Product Information | Certification of Analysis

I Product Information

CAS: 916777-57-6

Lot No.

rldeZ | Mass Spec Grade

Part No.	Name	Size
HLS IDEZ001	rldeZ	20 µg
HLS PBS001	digestion buffer	0.5 mL

Description: rldeZ, MS grade, is an engineered recombinant protease overexpressed in *Escherichia coli*. It cleaves specifically at a single recognition site below the hinge region to produce homogenous F(ab')₂ and Fc fragments. Both IdeS and IdeZ proteases effectively cleave human IgG1, IgG2, IgG3, and IgG4, monkey, sheep, rabbit, humanized and chimeric IgG, and Fc fusion proteins. However, only the IdeZ protease cleaves mouse IgG2a and IgG3.

Physical Appearance: Lyophilized powder

Molecular Weight: 37 kDa

Resuspension Buffer (reference): 40 µL double-distilled water from user

Digestion Buffer: 10X 50 mM PBS, 150 mM NaCl (pH 6.6) solution

Storage Conditions: Powder at -20 °C

Shelf Life: 24 months at -20 °C

pH Range: Maximally active at pH 6-8

Application: rldeS protease is an IgG-specific degradation enzyme to produce homogeneous F(ab')₂ and Fc fragments.

In-Solution Protein Digestion Protocol (Recommended):

1. Mix 5 µL 10X enzyme digestion buffer (HLS PBS001) and double-distilled water.
2. Add 10 µL 10 µg/µL mAb samples to the mixture.
3. Add 4 µL 0.5 µg/µL rldeS (HLS IDE001) to the mixture to total reaction volume of 50 µL.
4. Incubate at 37 °C for 30 min.

I Quality Control

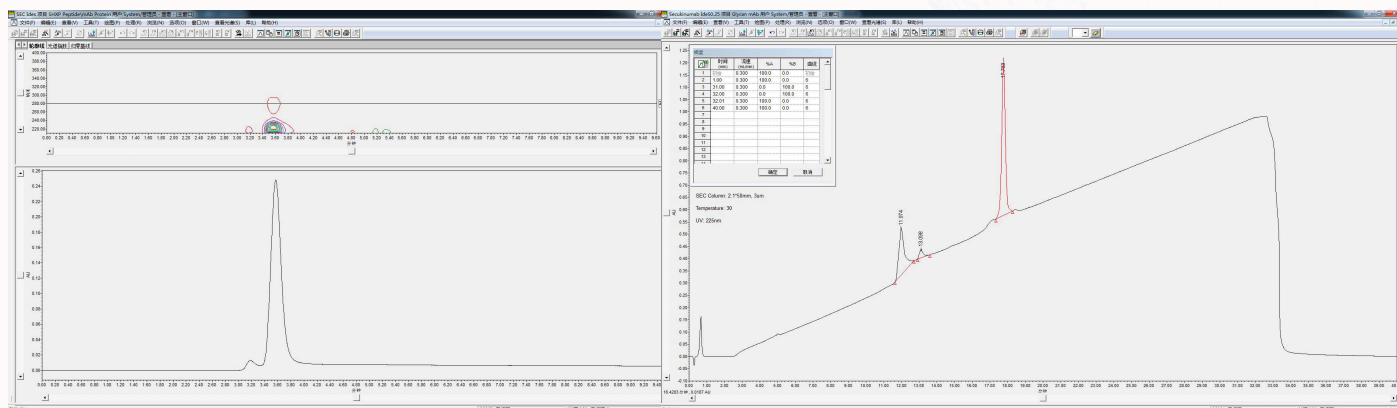
Purity: > 99.5%

Specificity: > 99.3% purity of mAb antibody samples after rldeS digestion and elution with mAB pH ion mobility buffer, analyzed by UPLC chromatography with SCX 2.1*50 mm column.

Activity: 50 units/µg

Unit Definition: One unit is the amount of 1 µg rldeZ required to produce 50 µg substrate IgG antibody at 37 °C in 30 min.

MALDI-TOF Analysis: Purified rldeZ was analyzed by HCCA matrix laser analytical mass spectrometry. No impurity peak was found.



QA Manager Signature:

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