# Recombinant IdeZ, Mass Spec Grade

**Cat. No.** IdeZ-45 **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | rideZ, MS grade, is an engineered recombinant protease overexpressed in Escherichia coli. |
| **Source** | E.coli |
| **Description** | 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. |
| **Form** | Lyophilized powder |
| **Bio-activity** | 50 units/μg |
| **Molecular Mass** | 37 kDa |
| **Purity** | > 99.5 % |
| **Applications** | rIdeS protease is an IgG-specific degradation enzyme to produce homogeneous F(ab')2 and Fc fragments. |
| **Storage** | Powder at -20 centigrade |
| **CAS No.** | 916777-57-6 |

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| **Shelf life** | 24 months at -20 centigrade |
| **Usage Notes** | In-Solution Protein Digestion Protocol (Recommended): 1. Mix 5 μL 10X enzyme digestion buffer and double-distilled water. 2. Add 10 μL 10 μg/μL mAb samples to the mixture. 3. Add 4 μL 0.5 μg/μL rIdeS to the mixture to total reaction volume of 50 μL. 4. Incubate at 37 centigrade for 30 min. |
| **Specificity** | > 99.3 % purity of mAb antibody samples after rIdeS digestion and elution with mAB pH ion mobility buffer, analyzed by UPLC chromatography with SCX 2.1*50 mm column. |
| **Unit Definition** | One unit is the amount of 1 μg rIdeZ required to produce 50 μg substrate IgG antibody at 37 centigrade in 30 min. |
| **Resuspension Buffer** | 40 μL double-distilled water from user |
| **MALDI-TOF Analysis** | Purified rIdeZ was analyzed by HCCA matrix laser analytical mass spectrometry. No impurity peak was found. |
| **pH Range** | Maximally active at pH 6-8 |
| **Digestion Buffer** | 10× 50 mM PBS, 150 mM NaCl (pH 6.6) solution |

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