Insight into the substrate specificity of keratinase KerSMD from *Stenotrophomonas maltophilia* by site-directed mutagenesis studies in S1 pocket

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Table S1. Nucleotide sequences of primers used for site-directed mutagenesis.

Mutagenic site	Primer sequence (5'-3')
S180G	ATGAGCCTGGGTGGAGGCGGCAGCTGTGAC
E208S	GCGGCCGGCAACTCGACCGACAACGCTT
E208N	GCGGCCGGCAACAACACCGACAACGCTT
Tyr215 saturation mutagenesis	ACAACGCTTCCAAGNNKCGTCCGGCCAGTTG
R216W	ACGCTTCCAAGTACTGGCCGGCCAGTTGC
R216Y	ACGCTTCCAAGTACTACCCGGCCAGTTGC

[a] Nucleotide sequences corresponding to the mutated amino acids are underlined.

[b] N represents A, T, G, or C, and K represents G or T.

Fig. S1. The SDS-PAGE of the wild type (KerSMD) and its single site mutants. The 10% (w/v) gel of SDS-PAGE was used. The concentration of protein sample was 2 μg. Before uploaded to gel, all samples were heated at 98 °C for 8 min with 5 × loading buffer (Sangong, Shanghai). After electrophoresis, protein was stained with Coomassie Brilliant Blue R250 and faded with 20% (v/v) acetic acid.