

Supplementary Table S1. Purification step of the recombinant Est29 and Lip29

	Total activity (U) <sup>a</sup>	Total protein (mg) <sup>b</sup>	Specific activity (U/mg)	Yield (%)	Purification (-fold)
Est29					
Cell-free extract	96.3	1505.1	0.06	100	1.0
Heat treatment	78.3	388.2	0.20	81.4	3.2
Ni-NTA	1.2	1.3	0.92	1.3	14.4
Lip29					
Cell-free extract	36.7	1087.0	0.03	100	1.0
Heat treatment	11.9	293.1	0.04	32.5	1.2
Ni-NTA	2.1	0.9	2.27	5.8	67.3

<sup>a</sup>The activity unit is expressed as  $\mu\text{mol}/\text{min}$  with *p*NP-C16 as substrate.

<sup>b</sup>The amount of total protein was determined by the Bradford assay using BSA as a standard.