SUPPLEMENTARY MATERIAL

Purification and biochemical characterization of two novel extracellular keratinases with feather-degradation and hide-dehairing potential

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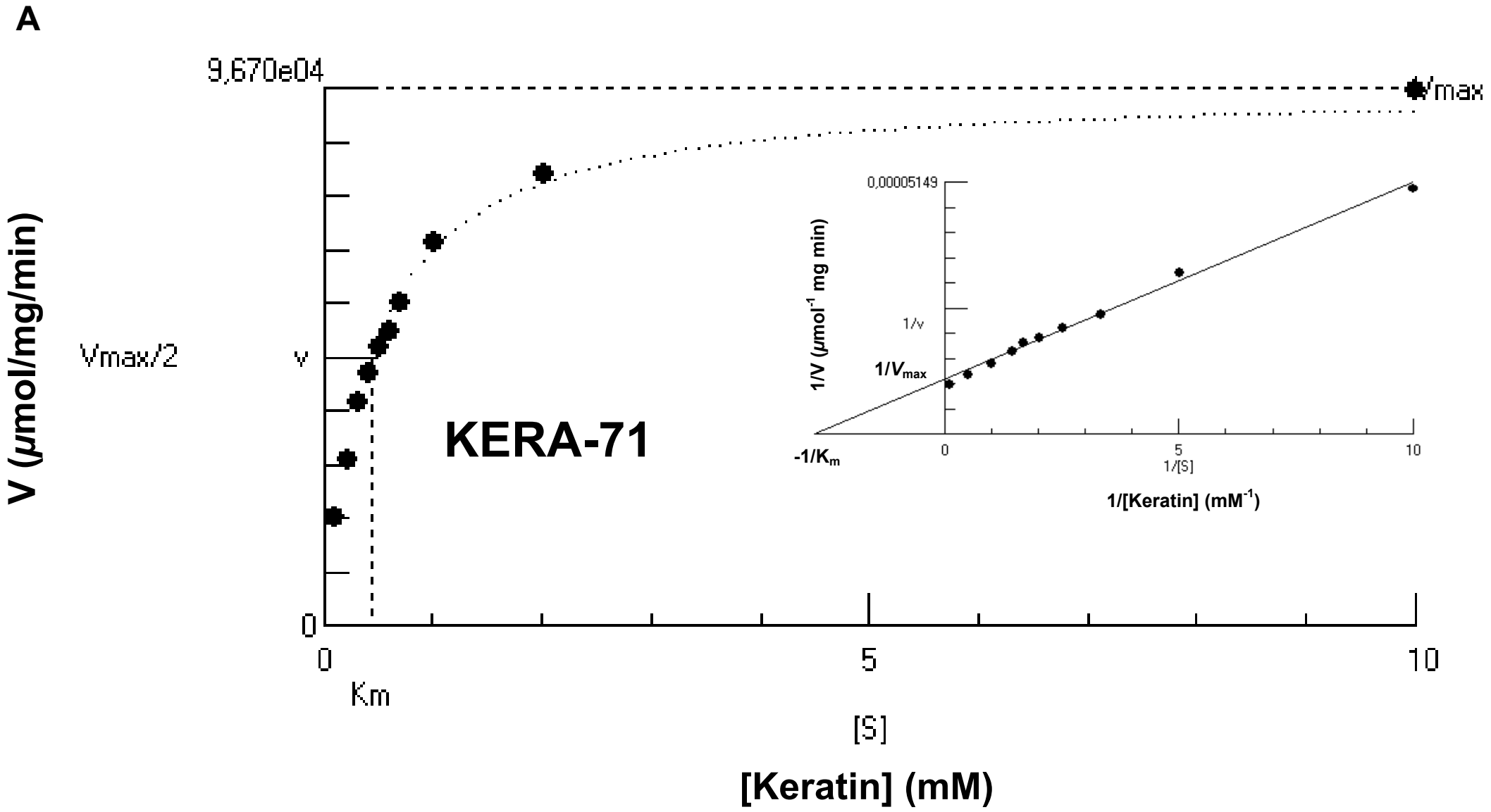
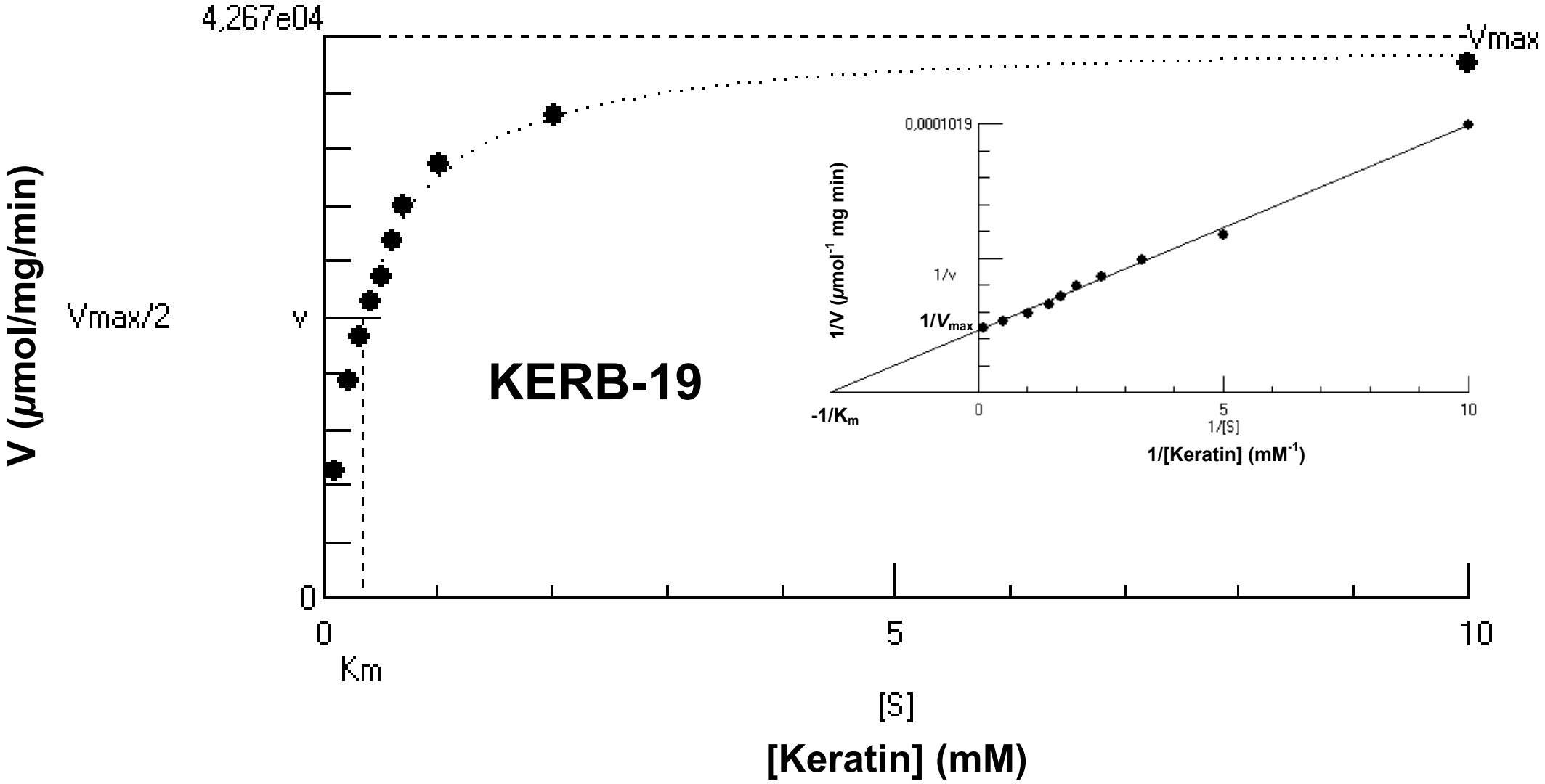
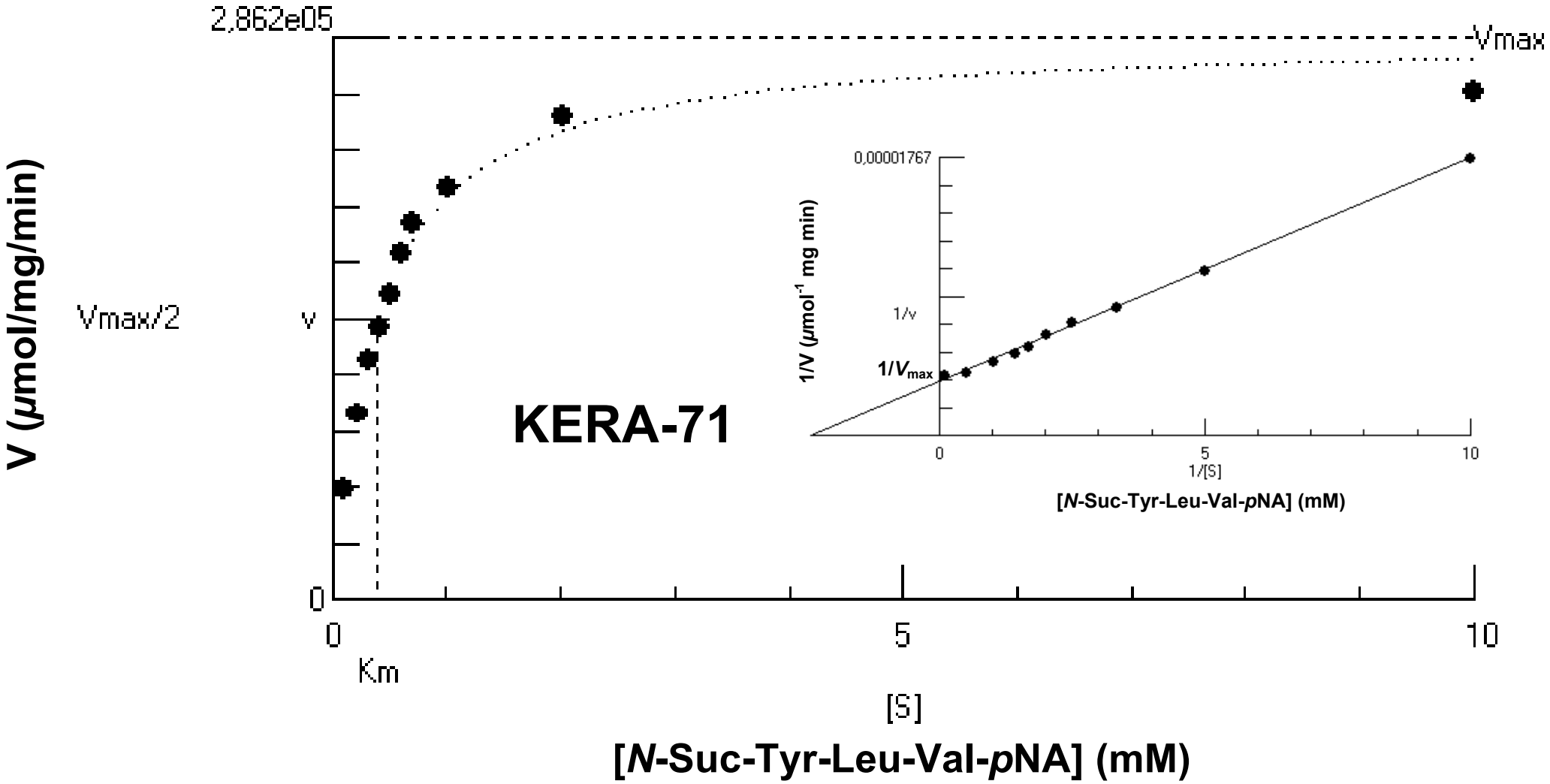

A
9,670e04
Vmax
V (µmol/mg/min)
Vmax/2
v
KERA-71
0
0
5
10
Km
[S]
[Keratin] (mM)
0,00005149
1/V (µmol-1 mg min)
1/v
1/Vmax
-1/Km
0
5
10
1/[S]
1/[Keratin] (mM-1)

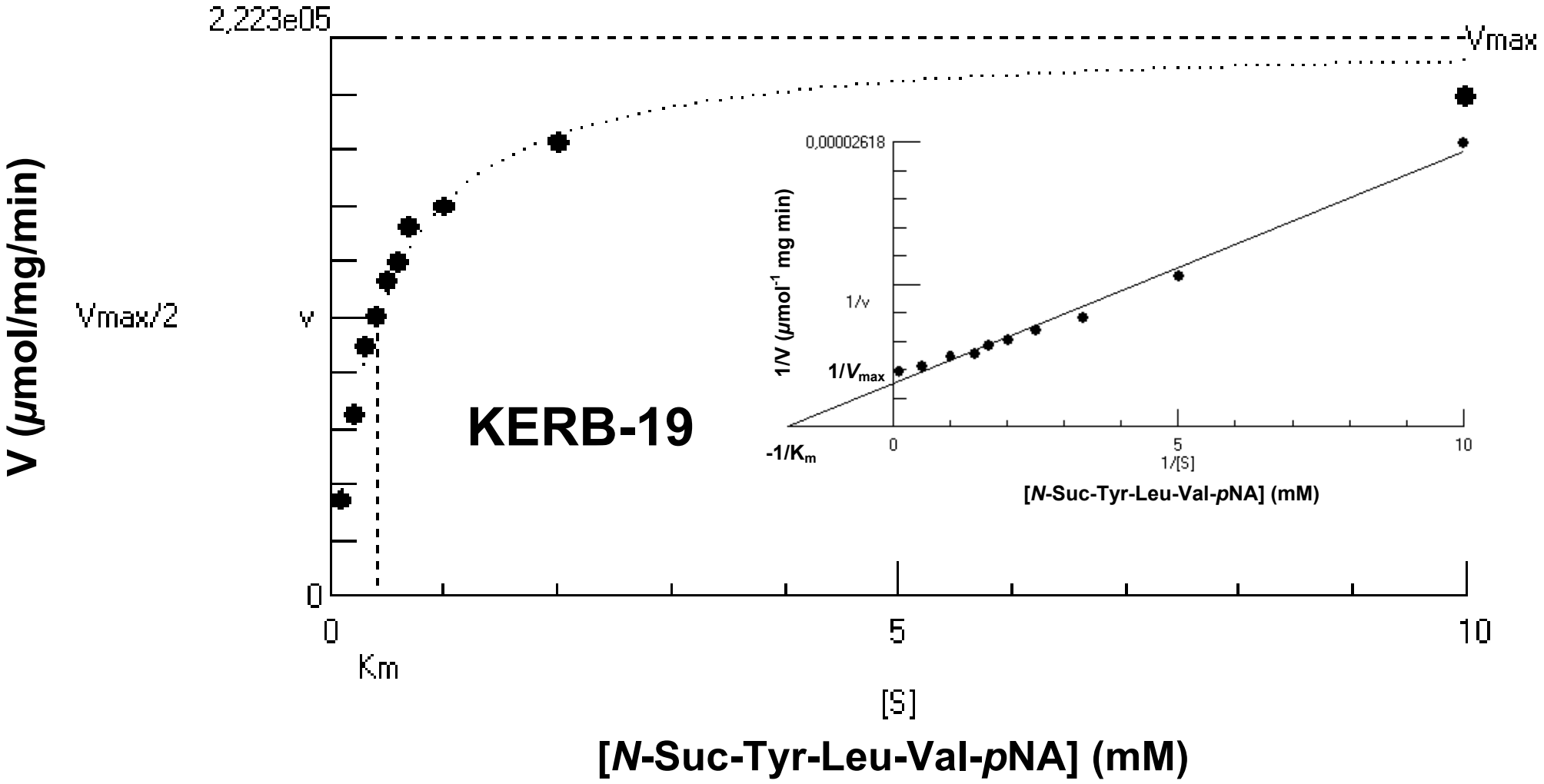
B


4,267e04
Vmax
Vmax/2
v
0
0
Km
5
10
[S]
V (µmol/mg/min)
[Keratin] (mM)
KERB-19
0,0001019
1/V (µmol-1 mg min)
1/v
1/Vmax
-1/Km
0
5
10
1/[S]
1/[Keratin] (mM-1)

C


2,862e05
Vmax
Vmax/2
v
0
0
Km
5
10
[S]
V (µmol/mg/min)
[N-Suc-Tyr-Leu-Val-pNA] (mM)
KERA-71
0,00001767
1/V (µmol-1 mg min)
1/v
1/Vmax
0
5
10
1/[S]
[N-Suc-Tyr-Leu-Val-pNA] (mM)

D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Vmax
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v
0
0
Km
5
10
[S]
V (µmol/mg/min)
[N-Suc-Tyr-Leu-Val-pNA] (mM)
KERB-19
0,00002618
1/V (µmol-1 mg min)
1/v
1/Vmax
-1/Km
0
5
10
1/[S]
[N-Suc-Tyr-Leu-Val-pNA] (mM)

SUPPLEMENTARY MATERIAL

Figure S1. Michaelis-Menten graphs for the hydrolysis of keratin (**A**) and (**B**) and *N*-Suc-Tyr-Leu-Val-*p*NA (**C**) and (**D**) catalyzed by the purified keratinases KERA-71 and KERB-19 from *A. keratinilytica* strain Cpt20. The substrate concentrations ranged from 0.1 mM to 10 mM. Insertions: graphs of the double reciprocal Lineweaver-Burk plots.