

**CERTIFICATE OF ANALYSIS**

<b>PRODUCT</b>	<b>PROTEINASE K from <i>Tritirachium album</i></b>		
<b>Item-Nr.</b>	# 1344	EC 3.4.21.14	
<b>CAS-Nr.</b>	[39450-01-6]	HS-Nr. 3507 90 0	EG-Nr. 254-457-8
<b>Lot-Nr.</b>	<b>270611</b>		

<b>Tests</b>	<b>Method</b>	<b>Specifications</b>		
<b>Appearance</b>	Pr.	White lyophilisate		
		min.	max.	unit
<b>Activity</b>	Pr. determined by appearance of Folin-positive amino acids released from denatured hemoglobin in 1 min at pH 7.5, 37°C Anson, M.L. (1938), J. Gen. Physiol. 22, 79-98	30.0		U/mg
<b>Specific Activity</b>	Pr. calculated on protein	40.0		U/mg
<b>DNases</b>	Pr. Nicking activity; pBR 322; 6h	not detectable		
<b>RNases</b>	Pr. RNA; 2 h; 37°C	not detectable		
<b>Unit definition</b>	That amount of enzyme that causes blue color after reaction with Folin reagent corresponding to 1 µmol tyrosine released at pH 7.5, 37 °C per minute			
<b>Stability</b>	Wide pH-range 4.0-12.5; pH optimum 7.5-8.0			
<b>Temperature Optimum</b>	65 °C. Rapid denaturation above 65 °C			
<b>Stimulation of Activity</b>	By denaturing agents such as urea (14 M) or SDS (1.2-1%)			
<b>Stabilization</b>	Calcium ion protects against autolysis, increases thermal stability and has regulatory function for substrate binding site of Proteinase K			
<b>Stock solution</b>	50 mg in 3 ml water,			
<b>Working Concentration</b>	Recommended 0.1– 1 mg/ml. Dilute stock solution ca 1/25			
<b>Storage</b>	2 – 8°C; no adverse effect of ambient temperature for some days or in shipping			
<b>Spec. established Latest update</b>	N.G. CA 207.25.Okt.2002 ed. 22 June 2011	..... Date                      Laboratory Manager		