

● TOYOBO BIOCHEMICAL PRODUCTS ●
(Diagnostic Reagent Grade)

NEO PROTEIN SAVER

from Silk Protein

PREPARATION and SPECIFICATION

Appearance	: White amorphous powder	
Grade	: Grade III	
Contaminants	: Alkaline phosphatase	Not detected* ¹
	Peroxidase	Not detected* ²
	Neutral Proteinase	Not detected* ³

PROPERTIES

Stability	: Stable at 25°C for at least one year	(Fig.3)
Average molecular weight	: approximately 30,000 (hydrolysate)	

APPLICATIONS

Neo Protein Saver is useful for stabilizing enzymes and conjugated antibodies. (Fig.1, 2)

(*¹ $\leq 9 \times 10^{-4}$ U/mg, *² $\leq 4 \times 10^{-2}$ U/mg, *³ $\leq 5 \times 10^{-1}$ U/mg)

Examples

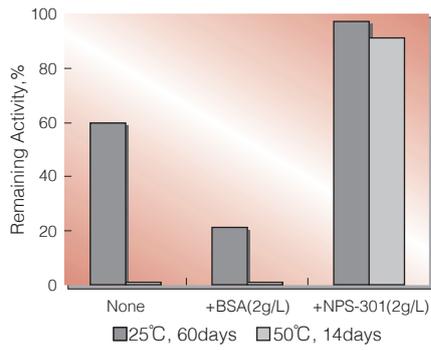


Fig. 1. NPS-BSA Comparison: Stabilizing Efficiency 1 (Liquid form Enzyme)

Remaining activity for Peroxidase(5U/ml PEO-302) in 50mM PIPES-NaOH solution after 60days at 25°C or 14days at 50°C

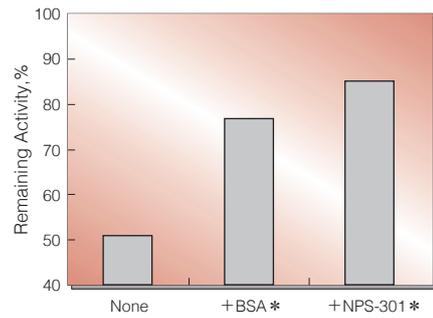


Fig. 2. NPS-BSA Comparison: Stabilizing Efficiency 2 (Powder form Enzyme)

Remaining activity for Cholesterol oxidase(COO-321 containing K-phosphate buffer) after 14days at 50°C

*Equivalent amount of NPS-301 or BSA are added on enzyme protein

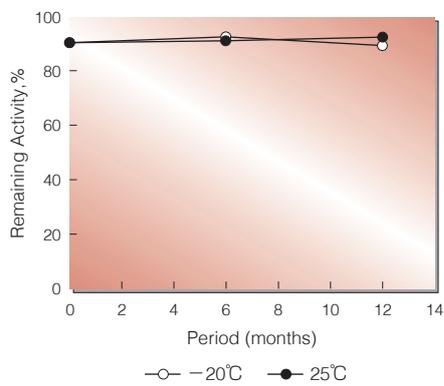


Fig. 3. Stability (Powder form)

Stability of NPS after 6 or 12 months, measured by stabilizing efficiency for Peroxidase at the same condition with Fig.1. after 14 days at 50°C NPS were kept under dry conditions.