

## 5D PROTEIN STABILIZER (10% Hydrolyzed Porcine Collagen Peptides)

<b>REF</b>	<b>5D-82411S</b>	<b>50 mL</b>
<b>REF</b>	<b>5D-82411A</b>	<b>100 mL</b>
<b>REF</b>	<b>5D-82411B</b>	<b>1000 mL</b>

**For Laboratory Use Only.**  
**Not for use in human or direct animal applications.**  
**Store at 2-8°C**

*5D Protein Stabilizer stabilizes and increases the shelf life of proteins and enzymes and is a BSA alternative with minimal lot to lot variation.*

### DESCRIPTION

Hydrolyzed porcine collagen peptide fraction, from dermal origin, which can be used as a protein stabilizer for lyophilized or liquid formulations, or as a blocking agent for coated surfaces. 5D Protein Stabilizer is free from cartilage, bone and plasma components. The product is sterilized for a long-term storage.

### FORMULA

Pig collagen peptides, from hydrolyzed collagen, heat stable.

### MOLECULAR WEIGHT

10 to 20 kDa

### COMPOSITION

Aqueous solution containing 10% hydrolyzed collagen peptides, free of any additives. pH of around 7.00.

### SOLUBILITY

Totally soluble in water.

### PORCINE COLLAGEN PEPTIDES ACTIVITY

Unknown toxic and non-antigenic activity.

### PRINCIPLE

Concentrated solution of hydrolyzed porcine collagen peptides, highly efficient as protein stabilizer.

### PREPARATION

Obtained from purified porcine collagen, diluted at a 10% (100 mg/ml) concentration, hydrolyzed at high temperature, filtrated on a 0.2 µ filter and sterilized.

### APPLICATIONS

Can be used for protein stabilization, in lyophilized formulations or in liquid solutions, during urea, ethanol or heat treatment. Applications as active sites blocker in ELISAs or on coated surfaces.

### STORAGE AND STABILITY

Stable until the expiration date printed on the bottle label, when stored at 2-8°C.

Can be frozen.

As 5D Protein Stabilizer contains no preservatives, when open the bottle must be used within 24 hours and any contamination must be avoided.

Alternatively, 5D Protein Stabilizer when open can be supplemented with preservatives for preventing microbiological or fungal contamination and growth (sodium azide at 0.9 mg/ml final or BNP at 0.1 mg/ml are recommended).

Protect from light.

### WARNINGS AND PRECAUTIONS

**For Laboratory Use Only.**  
**Not for use in human or direct animal applications.**

### REFERENCES

1. Gaffney PJ, Edgell TA, Dawson PA, Ford AW, Stocker E, A pig collagen peptide fraction. A unique material for maintaining biological activity during lyophilization and during storage in the liquid state, J Pharm Pharmacol. 1996 Sep;48(9):896-8
2. Armin Baur, Ralf Reski, Gilbert Gorr, Enhanced recovery of a secreted recombinant human growth factor using stabilizing additives and by co-expression of human serum albumin in the moss Physcomitrella patens, Plant Biotechnology Journal (2005) 3, pp. 331–340
3. C. Berrettoni, C. Trono, S. Berneschi, A. Giannetti, S. Tombelli, R. Bernini, A. Grimaldi, G. Persichetti, G. Testa, L. Bolzoni, G. Porro, H. Becker, C. Gärtner, F. Baldini, A newly designed optical biochip for a TDM – POCT device, Proceedings of SPIE - The International Society for Optical Engineering, (2014); Vol. 8976
4. Kerstin von Kolontaj, Gabor L. Horvath, Eicke Latz, Martin Büscher, Automated Nanoscale Flow Cytometry for Assessing Protein–Protein Interactions, Cytometry Part A \_ 89A: 835\_843, (2016)