

NexGen HM Proteinase K Inhibitors

Proteinase K Inhibitor

Proteinase K is a 28.93kDa endopeptidase of the serine protease family and is called so because of its ability to hydrolyze keratin. It is a highly active enzyme which is active under a wide range of buffers and pH (7.5 - 12). An important application of proteinase K is to inactivate DNase and RNase to obtain highly pure nucleic acid extracts. But while purifying functional proteins it becomes imperative to eliminate proteinase K as it is a highly active subtilisin – like serine protease. Therefore, it is necessary to inhibit them to prevent proteolysis during protein isolation protocols.

Our NexGen HM Proteinase K Inhibitors is the most efficient protease inhibitor against Proteinase K.

Description

Specificity

This product is a specifically synthesized proteinase K inhibitor.

Recommended buffer conditions

- Lysis buffer
- **Radioimmunoprecipitation assay buffer (RIPA)** RIPA lysis buffer composition (300mM NaCl, 1% NP-40, 0.5% Sodium deoxycholate, 0.1% SDS, 50mM Tris pH 8.0)
- **NP-40 tissue lysis buffer** NP-40 buffer composition (50mM Tris-Cl pH 7.5, 150mM NaCl, 0.5% NP-40, 1mM Na-pyrophosphate, 5mM Na-orthovanadate, 1mM Benzamidine, 10mM Sodium fluoride)
- **Phenol buffer for plant protein extraction** Phenol buffer composition (0.7M Sucrose, 0.5 M Tris, 30mM HCl, 50mM EDTA, 0.1M KCl)
- **Tris, NaCl Buffer**
- **Water**

Packaging

- 5 ml in amber vials

FORM	Liquid
STORAGE CONDITIONS	Room Temperature
TOXICITY	Non-toxic
RECOMMENDED REACTION CONDITIONS	Room Temperature

SAFETY DATA SHEET

SECTION 1: Identification of the product and of the company

1.1 Product identifiers

Product name	Proteinase K Inhibitor
Brand	BioPioneer
CAT No.	BPBOI002
Identified uses	Laboratory chemicals

1.2 Details of the supplier of the safety data sheet

Company	BioPioneer Pvt Ltd KIIT-TBI, Campus 11 Patia, Bhubaneswar Khorda -751024 INDIA www.biopioneer.in
Contact Us	info@biopioneer.in Phone +917991084428/ 9437274187

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 Label elements

Not a hazardous substance or mixture.

2.3 Other hazards

This substance/mixture contains no components considered to be persistent, bioaccumulative and toxic.

SECTION 3: Composition/information of ingredients

3.1 Mixtures

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first aid measures

In case of skin contact

This substance does not irritate the skin. Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Personal protection

5.1 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Material: Nitrile rubber

Minimum layer thickness: 6 mm

Break through time: 240 min

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

No special environmental precautions required.

SECTION 6: Physical and chemical properties

6.1 Information on basic physical and chemical properties

- | | |
|--------------------|---------|
| a) Appearance Form | liquid |
| b) Odor | No odor |

c) Odor Threshold	No data available
d) pH	6
e) Melting point / freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	101.1°C
h) Evaporation rate	680mg/L
i) Flammability (solid,gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapour pressure	No data available
l) Vapour density	No data available
m) Relative density	No data available
n) Water solubility	yes
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	1CPS
s) Explosive properties	No data available
t) Oxidizing properties	No data available

SECTION 7: Stability and reactivity

7.1 Reactivity

No data available

7.2 Chemical stability

Stable under room temperature.

Stable under alkaline pH conditions

Not stable under acidic conditions

7.3 Possibility of hazardous reactions

No data available

7.4 Incompatible materials

Strong oxidizing agents, Strong acids

7.6 Hazardous decomposition products

No data available

SECTION 8: Toxicological information

8.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

Non corrosive/irritant