

Datasheet: PBP013

Description:	NATIVE BOVINE GELSOLIN
Name:	GELSOLIN
Other names:	GSN
Format:	Purified
Product Type:	Purified Protein
Quantity:	20 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Functional Assays	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

Target Species	Bovine
Product Form	Purified protein from bovine plasma - lyophilized
Reconstitution	Use sterile distilled water to give a concentrated stock solution => 1 mg/ml.
Buffer Solution	Tris buffered saline, EGTA
Preservative Stabilisers	See Buffer solution.
Approx. Protein Concentrations	5%, remainder buffer salts.
External Database Links	<p>UniProt:</p> <p>Q3SX14 Related reagents</p> <p>Entrez Gene:</p> <p>535077 GSN Related reagents</p>

Product Information **Native Bovine gelsolin** is a calcium and polyphosphoinositide regulated actin-binding protein which consists of 6 homologous domains. It is involved in cell morphology, motility, growth and apoptosis. Gelsolin affects filament assembly by severing actin filaments, forming a nucleus for polymerisation, and capping the fast exchanging end of the filaments.

Activity 54 U/mg protein.
One unit will reduce the viscosity difference between an actin solution and buffer by 50% in a 1 ml reaction mixture containing 1-2 mg F-actin, 0.15 M KCl, 20 mM TRIS, pH 7.6, 0.2 mM CaCl₂, 0.2 mM ATP and 1 mM DTT at 28°C.

Purity SDS PAGE: >95%

References

1. Yin, H. L. & Stossel, T. P. (1980) Purification and structural properties of gelsolin, a Ca²⁺-activated regulatory protein of macrophages. [J. Biol. Chem. 255: 9490-9493.](#)
2. Yin, H. L. *et al.* (1988) Identification of a polyphosphoinositide-modulated domain in gelsolin which binds to the sides of actin filaments. [J. Cell Biol. 106\(3\): 805-812.](#)
3. Sun, H. Q., *et al.* (1994) The actin side-binding domain of gelsolin also caps actin filaments. Implications for actin filament severing. [J. Biol. Chem. 269\(13\): 9473-9479.](#)
4. Burtneck, L. D., *et al.* (1997) The crystal structure of plasma gelsolin: implications for actin severing, capping, and nucleation. [Cell 90\(4\): 661-670.](#)

Storage Prior to reconstitution store at +4°C.
After reconstitution store at -20°C.
Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the protein.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10323 available at:
10323: <https://www.bio-rad-antibodies.com/uploads/MSDS/10323.pdf>

Regulatory For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
'M391179:211008'

Printed on 08 Oct 2021

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