

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 - lyophilised
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	UniProt: Q3SX14 Related reagents Entrez Gene: 535077 GSN Related reagents
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 CaCl ₂ , 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. <i>et al.</i> (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., <i>et al.</i> (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. Burtnick, L. D., <i>et al.</i> (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.
Shelf Life	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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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