Product Data Sheet

Recombinant Multidrug Resistance ABC Transporter ATP-Binding/Permease Protein BmrA

Information

PRODUCT DETAILS	
Compound Name	Multidrug Resistance ABC Transporter ATP-binding/permease protein BmrA
Catalog Numbers	41-T101A-10UG 41-T101A-50UG 41-T101A-BULK
Class	Multidrug Resistance ABC Transporter
Sequence	Full-length, wildtype sequence, with a N-terminus 6His-tag: MSSSHHHHHHMPTKKQKSKSKLKPFFALVRRTNPSYGKLAFALALSVVTTL VSLLIPLLTKQLVDGFSMSNLSGTQIGLIALVFFVQAGLSAYATYALNYNGQK IISGLRELLWKKLIKLPVSYFDTNASGETVSRVTNDTMVVKELITTHISGFITG IISVIGSLTILFIMNWKLTLLVLVVVPLAALILVPIGRKMFSISRETQDETARFTG LLNQILPEIRLVKASNAEDVEYGRGKMGISSLFKLGVREAKVQSLVGPLISLV LMAALVAVIGYGGMQVSSGELTAGALVAFILYLFQIIMPMGQITTFFTQLQKSI GATERMIEILAEEEEDTVTGKQIENAHLPIQLDRVSFGYKPDQLILKEVSAVI EAGKVTAIVGPSGGGKTTLFKLLERFYSPTAGTIRLGDEPVDTYSLESWRE HIGYVSQESPLMSGTIRENICYGLERDVTDAEIEKAAEMAYALNFIKELPNQ FDTEVGERGIMLSGGQRQRIAIARALLRNPSILMLDEATSSLDSQSEKSVQ QALEVLMEGRTTIVIAHRLSTVVDADQLLFVEKGEITGRGTHHELMASHG LYRDFAEQQLKMNADLENKAG
Affinity Tag	His-tag (N-terminal)
Origin	*Bacillus subtilis* (strain 168)
Theor. MW	64.5 kDa
Accession #	O06967 (UniProt)
Purification	Immobilized Metal Affinity Chromatography
Purity	>90%
Activity	Confirmed by ATPase activity assay
Sample Buffer	50mM Tris-Cl pH 8.0, 100 mM NaCl, 0.01% DDM, 10% glycerol
Available Quantity	From 10 µg up to mg scale
Shipment Temperature	Dry ice
Storage Conditions	Store at -80°C

Quality Controls

Purity

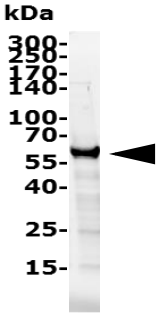

Figure 1: SDS-PAGE

IMAC elution fraction of BmrA was migrated on a 4-15% Tris-glycine SDS-PAGE and the total proteins were Stain-Free detected. The black arrow indicates full-length BmrA.

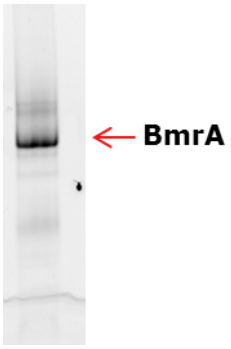

Figure 2: Clear Native-PAGE.

Purified BmrA was migrated on a 4-15% Tris-glycine native-PAGE and the total proteins were Stain-Free detected.

Activity

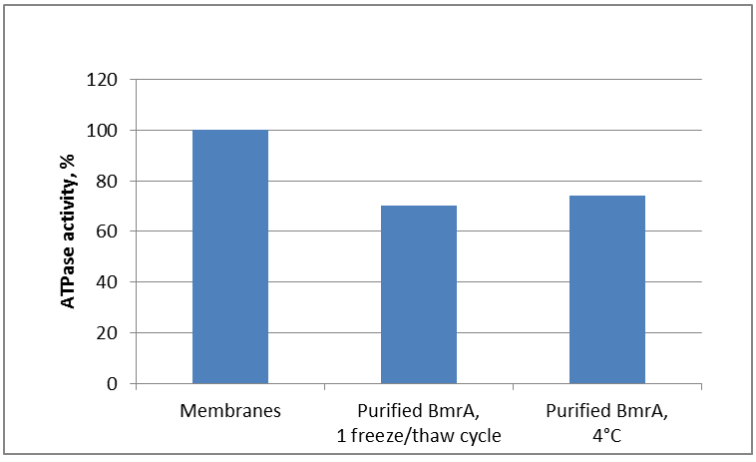

Figure 3: ATPase activity of BmrA.

Sample specific ATPase activity was measured by a colorimetric assay (see 2 and 3).

References

[1] Desuzinges Mandon E. et al. Novel systematic detergent screening method for membrane proteins solubilization. *Anal Biochem*. 2017 Jan 15;517:40-49.

[2] Matar-Merheb R. et al. Structuring detergents for extracting and stabilizing functional membrane proteins. *PLoS One*. 2011 Mar 31; 6(3):e18036.

[3] Stéphanie Ravaud et al. The ABC transporter BmrA from Bacillus subtilis is a functional dimer when in a detergent-solubilized state. *Biochem J*. 2006 Apr 15; 395(Pt 2): 345–353.

Additional Information

Restricted use: Limited Use Label License

The purchase of this product conveys to the purchaser the limited, non-transferable right to use the purchased amount of the product and progeny, to perform internal research and development for the sole benefit of the purchaser.

Safety

Not known as a hazardous substance or mixture. General industrial hygiene practices must be followed as the use of adapted personal protective equipment for skin and body.

Technical support

For additional product and technical information email our Technical Support team at contact@calixar.com.

Limited product warranty

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