PROTEIN DATA SHEET – ACRB

RECOMBINANT MULTIDRUG EFFLUX PUMP SUBUNIT ACRB 2019

Protein information

Target Name	Multidrug efflux pump subunit AcrB
Catalogue Number	PP4
Class	Multidrug efflux pump
Sequence	Full-length, wildtype sequence, with a C-terminus 6xHis-tag: MPNFFIDRPIFAWVIAIIIMLAGGLAILKLPVAQYPTIAPPAVTISASYPGADAKTVQDTVTQVIEQNMN GIDNLMYMSSNSDSTGTVQITLTFESGTDADIAQVQVQNKLQLAMPLLPQEVQQQGVSVEKSSSSF LMVVGVINTDGTMTQEDISDYVAANMKDAISRTSGVGDVQLFGSQYAMRIWMNPNELNKFQLTPV DVITAIKAQNAQVAAGQLGGTPPVKGQQLNASIIAQTRLTSTEEFGKILLKVNQDGSRVLLRDVAKIE LGGENYDIIAEFNGQPASGLGIKLATGANALDTAAAIRAELAKMEPFFPSGLKIVYPYDTTPFVKISIHE VVKTLVEAIILVFLVMYLFLQNFRATLIPTIAVPVVLLGTFAVLAAFGFSINTLTMFGMVLAIGLLVDDAI VVVENVERVMAEEGLPPKEATRKSMGQIQGALVGIAMVLSAVFVPMAFFGGSTGAIYRQFSITIVSA MALSVLVALILTPALCATMLKPIAKGDHGEGKKGFFGWFNRMFEKSTHHYTDSVGGILRSTGRYLVL YLIIVVGMAYLFVRLPSSFLPDEDQGVFMTMVQLPAGATQERTQKVLNEVTHYYLTKEKNNVESVFAV NGFGFAGRGQNTGIAFVSLKDWADRPGEENKVEAITMRATRAFSQIKDAMVFAFNLPAIVELGTATG FDFELIDQAGLGHEKLTQARNQLLAEAAKHPDMLTSVRPNGLEDTPQFKIDIDQEKAQALGVSINDI NTTLGAAWGGSYVNDFIDRGRVKKVYVMSEAKYRMLPDDIGDWYVRAADGQMVPFSAFSSSRWE YGSPRLERYNGLPSMEILGQAAPGKSTGEAMELMEQLASKLPTGVGYDWTGMSYQERLSGNQAPSL YAISLIVVFLCLAALYESWSIPFSVMLVVPLGVIGALLAATFRGLTNDVYFQVGLLTTIGLSAKNAILIVE FAKDLMDKEGKGLIEATLDAVRMRLRPILMTSLAFILGVMPLVISTGAGSGAQNAVGTGVMGGMVT ATVLAIFFVPVFFVVVRRRFSRKNEDIEHSHTVDHHLEHHHHHH
Affinity Tag	His-tag (C-terminal)
Origin	*Escherichia coli* (strain K12)
Theor. MW	114.6 kDa
Accession #	P31224 (UniProt)

Protein production

Expression system	*Escherichia coli* (BL21C43)
Purification	Immobilized Metal Affinity Chromatography
Purity	>95%
Activity	Confirmed by ligand binding
Concentration	Up to 5mg/ml
Sample Buffer	25mM Na_2HPO_4, 100mM NaCl, 0.01% DDM
Available quantity	From 10µg to mg scale
References	1- Eicher T. et al. Transport of drugs by the multidrug transporter AcrB involves an access and a deep binding pocket that are separated by a switch-loop. *Proc Natl Acad Sci U S A.* 2012 Apr 10; 109(15):5687-92.

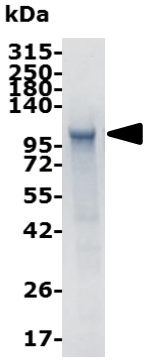
CALIXAR SAS – Share Capital of 118 554 € - SIRET 530 424 670 00020
60 avenue Rockefeller – 69008 Lyon - FRANCE
Tel: + 33 (0)481 076 460 - Fax: +33 (0)481 076 469 - Email: contact@calixar.com
Web: http://www.calixar.com

2- Pos KM. et al. Purification, crystallization and preliminary diffraction studies of AcrB, an inner-membrane multi-drug efflux protein. Acta Crystallogr Biol Crystallogr. 2002; D58 (Pt 10 Pt 2):1865–1867.

Miscellaneous

Shipment Temperature	Dry ice
Storage conditions	Store at -80°C

Quality Controls (Purity and Activity):

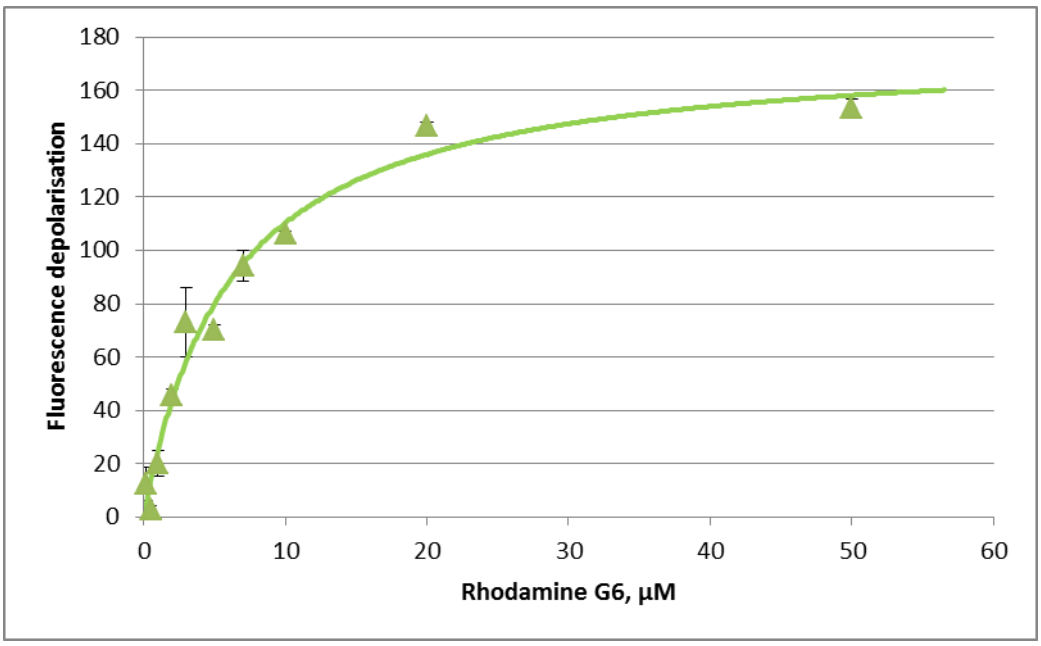


SDS-PAGE.
IMAC elution fraction of AcrB was migrated on a 4-15% Tris-glycine SDS-PAGE and the total proteins were Stain-Free detected. The black arrow indicates full-length AcrB.

CN-PAGE
Purified AcrB was migrated on a 4-15% Tris-glycine native-PAGE and visualized using Bio-Rad stain-free technology.

CALIXAR SAS – Share Capital of 118 554 € - SIRET 530 424 670 00020
60 avenue Rockefeller – 69008 Lyon - FRANCE
Tel: + 33 (0)481 076 460 - Fax: +33 (0)481 076 469 - Email: contact@calixar.com
Web: http://www.calixar.com

PROTEIN DATA SHEET – ACRB



QC: Activity measured by binding assay (fluorescence polarization)
Binding of Rhodamine G was measured on purified AcrB. A KD of 6µM was determined for Rhodamine G6.

Restricted use: All Calixar products or derived products shall be used for internal research only excluding any direct or indirect commercial uses. (Under patents rights – For other uses, please contact us at contact@calixar.com).

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 an 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

TO THE EXTENT ALLOWED BY LAW, CALIXAR WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

CALIXAR SAS – Share Capital of 118 554 € - SIRET 530 424 670 00020
60 avenue Rockefeller – 69008 Lyon - FRANCE
Tel: + 33 (0)481 076 460 - Fax: +33 (0)481 076 469 - Email: contact@calixar.com
Web: http://www.calixar.com