Supporting information

Title of the manuscript: Immunization with *Brugia malayi* Calreticulin protein generates robust anti-parasitic immunity and offers protection during experimental Lymphatic filariasis

Authors: Sunita Yadav^{a,#}, Pankaj Sharma^{b,#}, Aditi Sharma^{b,c}, Laxmi Ganga^b, Jitendra Kumar Saxena^{a,c,*}, Mrigank Srivastava^{b,c,*}

Authors affiliations:

^aBiochemistry Division, CSIR-Central Drug Research Institute, Lucknow - 226031, India.

^bMolecular Parasitology and Immunology Division, CSIR-Central Drug Research Institute, Lucknow - 226031, India.

^cAcademy of Scientific and Innovative Research (AcSIR), Ghaziabad - 201002, India.

These authors have equal contribution

* Corresponding authors information:

- 1. Jitendra Kumar Saxena, jkscdri@yahoo.com
- 2. Mrigank Srivastava, mrigank_srivastava@cdri.res.in

Present address:

Sunita Yadav: School of Biochemical Engineering, Indian Institute of Technology Banaras Hindu University, Varanasi - 221005, India.

Pankaj Sharma: Program in Cellular and Molecular Medicine, Boston Children's Hospital, Boston - 02115, MA, United States.

Aditi Sharma: Department of Pathology, University of California, San Diego - 92093, CA, USA.

Number of Pages: 1

Number of Figures: 1

Results

Figure S1: ClustalW multiple sequence alignment of Calreticulin protein from

Brugia malayi (bm) and Wuchereria bancrofti (w) showing 97% homology.

Supplementary figure 1

10/9/2020

CLUSTALW Result

CLUSTALW Result

[clustalw.aln][clustalw.dnd][readme] Select tree menu Exec

CLUSTAL 2.1 Multiple Sequence Alignments

Sequence type explicitly set to Protein Sequence format is Pearson Sequence 1: w 404 aa Sequence 2: bm 404 aa Start of Pairwise alignments Aligning...

Sequences (1:2) Aligned. Score: 97.0297 Guide tree file created: [clustalw.dnd]

There are 1 groups Start of Multiple Alignment

Aligning... Group 1: Sequences: 2 Score:6764 Alignment Score 2577

CLUSTAL-Alignment file created [clustalw.aln]

clustalw.aln

CLUSTAL 2.1 multiple sequence alignment

w bm	MQLYLLLGLVCFSVVSAKVYFKEEFSDDDWEKRWIKSKHKDDFGKWEISHGKFYGDAAKD MQLYLLLGLVCFSAVSAKIYFKEEFSDDDWEKRWIKSKHKDDFGKWEISHGKFYGDAVKD ************************************
w bm	KGLKTAQDAKFYSIGAKFEKGFSNKGKSLVVQFSVKHEQDIDCGGGYVKLMASNVNLEDF RGLKTAQDAKFYSIGAKFEKGFSNKGKSLVVQFSVKHEQDIDCGGGYIKLMASDVNLEDF
w bm	HGETPYHIMFGPDICGPGTKKVHVIFHYKGRNHMIKKDIRCKDDVFTHLYTLIVNSDNTY HGETPYHIMFGPDICGPGTKKVHVIFHYKGRNHMIKKDIRCKDDVFTHLYTLIVNSDNTY ************************************
w bm	EVQINGEKVESGELEADWDFLPPKKIKDPDAKKPEDWDEREYIDDEDDKKPEDWDKPEHI EVQINGEKVESGELEADWDFLPPKKIKDPDAKKPEDWDEREYIDDEDDKKPEDWDKPEHI
w bm	PDPDAKKPEDWDDEMDGEWEPPMVDNPEYKGEWKPKQKKNPAYKGKWIHPEIDNPDYTPD PDPDAKKPEDWDDEMDGEWEPPMVDNPEYKGEWKPKQKKNPAYKGKWIHPEIDNPDYTPD ************************************
w bm	DDLYIYEDIGAIGFDLWQVKSGTIFDDIIVTDNVEEAKKFGEKTLKKTKEGEKKMKEKQD DDLYLYGDIGAVGFDLWQVKSGTIFDDVIVTDSVEEAKKFGEKTLKKTKEGEKKMKEKQD ***** * ****
w bm	EEEEKKRKEEEEKKKEEEKEDEDKEEEEKEEDEKKKDDETHEEL EEEEKKRKEEEEKKKEEEKEEEDKEEEKEEDEKKKDDETHEEL ***********************************

https://www.genome.jp/tools-bin/clustalw