

SUPPLEMENTARY MATERIAL

RTB Lectin: a novel receptor-independent delivery system for lysosomal enzyme replacement therapies

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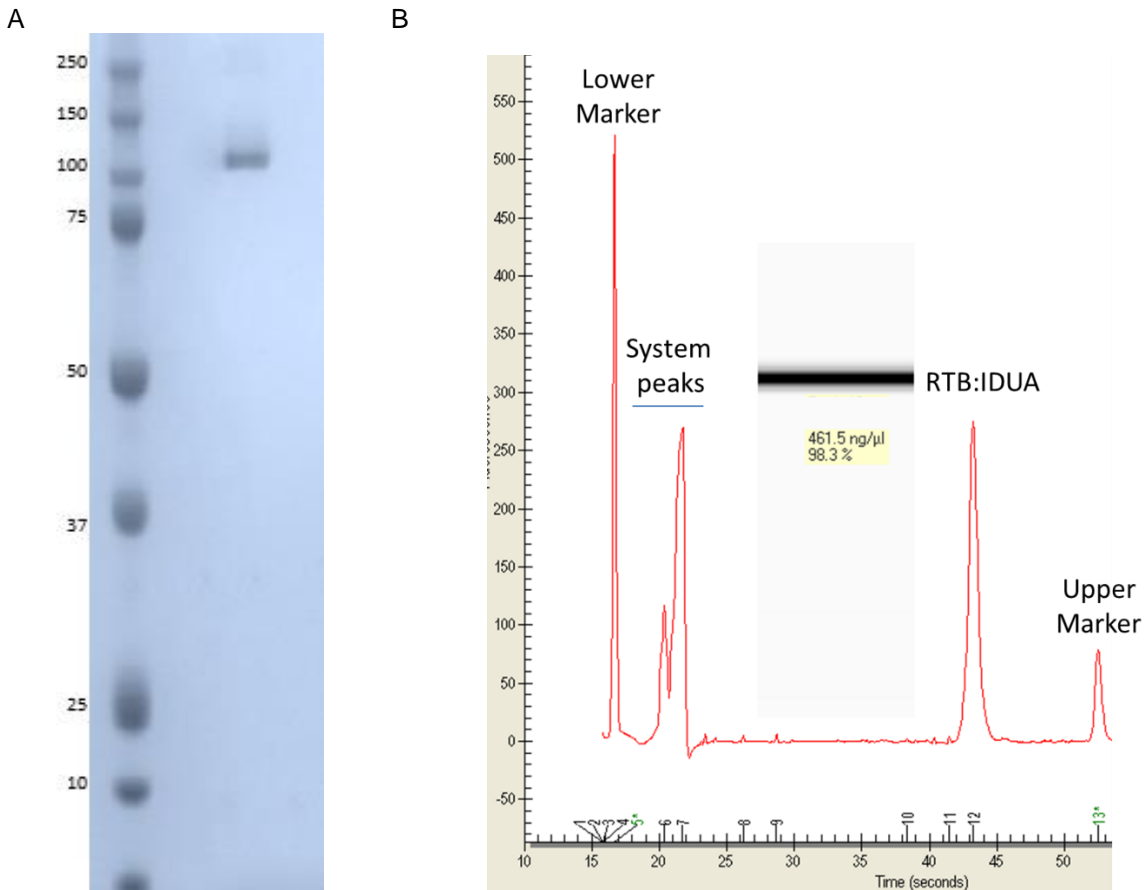
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Supplementary Figure S1. RTB:IDUA protein purity. After size exclusion, purified protein (1µg, measured by A₂₈₀) was size-separated by SDS-PAGE and Coomassie stained following manufacture instructions (Thermo). A single band of 120 kDa was detected (A). Percentage of purity was further confirmed at 98.3% using an automated electrophoresis station BioRad Experion® Pro260 chip following manufacturer's procedures (B).



Supplementary Figure S2. RTB:IDUA protein identification. Purified protein detected by Coomassie staining (e.g., Fig. S1) was analyzed at University of Arkansas for Medical Science Proteomics Core by in-gel trypsin digestion and tandem mass spectrometry (MS/MS). Excluding the patatin signal peptide, there is a 37% coverage (334/895) of the sequence encompassing 32 exclusive unique peptides and 46 exclusive unique spectra.

Patatin Signal Peptide

MATTKSFLIL	FFMILATTS	TCATSR	ADVC	MDPEPIVR	IV	GRNGLCVDVR	DGRFHNGNAI	QLWPCK	SNTD	ANQLWTLKR	NTIRSNKGKCL										
TTYGYS	SPGVY	VMIIYDCNTAA	TDATR	WQIWD	NGTI	INPRSS	LVLAATSGNS	GTTTLTVQTN	I	YAVSQGWLPT	NNTQPFVTTI	VGLYGLCLQA									
NSGQVWI	EDC	SSEK	AEQQA	LYADGS	IRPQ	QNRDNC	LTSD	SNIRETVVK	I	LSCGPASSGQ	RWMFKNDGTI	LNLYSGLVLD	VRASDPSLKQ								
IILYPL	HGDP	NQIWLPLFEA	PHLVQV	DAAR	ALWPLRR	FWR	STGFCPP	PLP	H	SOADQYVLSW	DQQLNLAYVG	AVPHRGIKQV	RTHWLELVT								
TRGSTGR	GLS	YNFTHLDGYL	DLLENQ	LLP	GFELMGS	ASG	HFTDFEDK	QQ	VFEWKDLVSS	LARRYIGRYG	LAHVS	KWNFE	TWNEPDHDF								
DNVSM	TMOGF	LNYYDACSEG	LRAAS	PALRL	GGPGDS	FHTP	PRSPLS	WGLL	RHCHDGTNFF	TGEAGVR	LDY	ISLHRK	GARS	SISILEQEKV							
VAQQIR	QLFP	KFADTPI	YND	EADPLV	QWSL	PPWRAD	VTY	AAAVK	VI	AO	HQNLL	LANTT	SAFPY	ALLSN	DNAFLSYHHP	PFAQRTL	TAR				
FQVNN	TRPPH	VQLLR	KPVL	T	AMGLL	ALLDE	EQLWAE	VSOA	GTVLD	SNHTV	GVLAS	AHRPQ	GPAD	AWRAV	LIYASD	DTRA	HPNRS	VAVTL			
RLRGV	PPPG	LVYV	TRYLDN	GLCS	PDGEWR	RLGR	PVFP	TA	EQFR	RRAE	DPVAA	APRPL	PAGGR	L	LRP	ALR	LP	SL	LLV	HVCAR	PEKPP
LEVPVPR	GPP	SPGN	PHHHH	H	W	TYEIQ	FSD	GKAYT	PVSRK	PSTFN	LVFVS	PDTG	AVS	GSY	RVR	ALDY	WAR	PGFFS	DPV	PY	