	iGEM Berlin Ferritin Library					
	Bacterial ferritins				Mammalian ferritins	
	Bacterioferritins (bfr)		Ferritins (ftn)			
Maximal iron atoms storage capacity (in vitro)	2000-3000		2000-3000		4500	
In vivo stored in atoms/holomer	44		70		200-300	
characteristics	Highest increase in iron capacity		Efficient and fast loading		Low phosphate contamination	
Design consideration	M52H mutagenesis deletes haem group, haem facilitates iron release via *bfd*				Higher stability and iron loading when N-terminal light chain is fused with long linker and C-terminal heavy chain	
Parts	BFR Expression Device BBa_K1438020	BFRM52H Expression Device BBa_K1438021	FTNA1 Expression Device BBa_K1438027	FTNA2 Expression Device BBa_K1438028	HuFerritin Expression Device BBa_K1438022	JBFS_Mil_Ferritin Expression Device BBa_K1438022
Source	E. coli Nissle 1917 genomic DNA	E. coli Nissle 1917 genomic DNA	E. coli Nissle 1917 genomic DNA	E. coli Nissle 1917 genomic DNA	iGEM Calgary 2013 synthesized construct	iGEM Berlin 2014 HuFerritin but changed order of subunits and connected via an long GS-linker by Assembly PCR
Sequenced part sent to registry	yes	yes	yes	yes	yes	yes
ProtParam Size	19,762 kDa	19,768 kDa	20,161 kDa	20,691 kDa	42,625 kDa	44,943 kDa
Features	N-terminal His-Tag	N-terminal His-Tag	N-terminal His-Tag	N-terminal His-Tag	N-terminal His-Tag	N-terminal His-Tag
Present in SDS-Gel	yes			yes	yes	yes