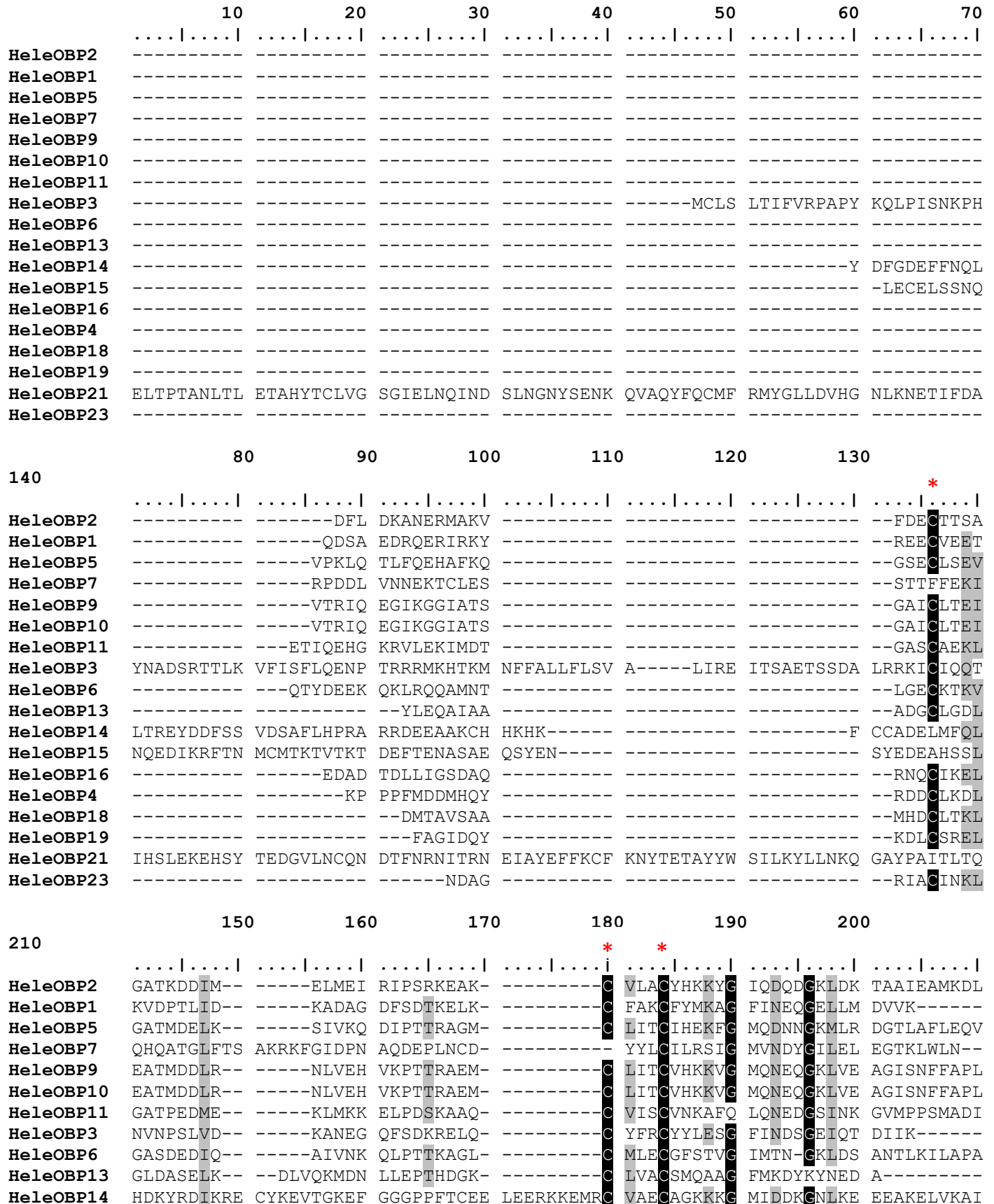


Figure S2. Alignment of OBP sequences



HeleOBP15	EEIPDARALS	KGNISNSTKS	TINNTRDGEN	LNNTTEITND	C	VVQC	VLKQLG	MVDPS	GYPDH	VKISEN-LMK
HeleOBP16	KFNADEIR--	---EIDSLDD	LDDMTMNEK-	-----	C	ILRC	VLMKLG	AIDKQ	GALVP	D-----
HeleOBP4	GLPADTATHP	PPSADGGPPS	NNEPSHDMK-	-----	C	LLNCL	LLRKG	ILNSS	GVLPQ	D-----
HeleOBP18	NIDLKEVN--	--AMENAVMT	NTEPSRDGK-	-----	C	LASCT	MEKAG	LTKDG	KIIVD	A-----
HeleOBP19	NVSVSNWQRE	PTSPEGKPTY	LAEPDHGGK-	-----	C	LLNCM	MLKAG	VIDET	GAIQ-	-----
HeleOBP21	SLKLETVHFT	CAMGSDVQLQ	SIKNSLNAIY	TDDNK--LTL		YFQC	VFRMYG	YVDKD	GSLKN	ETMLN----
HeleOBP23	NLNPDEIR--	---GVDALET	LEVLTKDEK-	-----	C	VLRC	MMLMELG	TIDSQ	GAIAP	A-----

220 230 240 250 260 270

280		
HeleOBP2	KVEDPELYDK	AVQLFDT	CIE	QVFNQ----	K	CECETA	-AIF	MYCF	NIYGKM	MGLKPGMVPM	-----
HeleOBP1	EKIPPEHDRE	KALAIIELCK	NLKE-----	S	DTCETA	-YAI	HKCY	FQNAHA	ANLHKN----	-----	
HeleOBP5	KD-DPAYYEL	VKEHFLYCLD	TVSNN----	D	EKCTIG	-NNF	MSCL	VLGGRK	KGIFD----	-----	
HeleOBP7	RNVPEYNN	MVEHATLCFQ	NIGKNNVN-E		TNCDRS	-PKY	IKCL	HNYEKC	QVFKFP----	-----	
HeleOBP9	MEADSDYFAV	SKQHFLDCAK	TVPDD----	D	DECVIG	-ARF	NDCV	IIGGKE	KGLLD----	-----	
HeleOBP10	MEADSDYFAV	SKQHFLDCAK	TVPDD----	D	DECVIG	-ARF	NDCV	IIGGKE	KGLLD----	-----	
HeleOBP11	KGIDEDIYNK	MATVWDIC	CSQ	KAVGS----	G	DECDAG	-IHL	VKCM	KEESEK	LGLTKEAMGF	-----
HeleOBP3	SKIPQKLDK	TAQQAIDTCK	KVKG-----	L	DSCE	-YEL	QKCL	YDN--K	VKL-----	-----	
HeleOBP6	LSKNEDKSKK	VTEALN	CEK	EVGNNG--	A	DGCETA	-KLI	AECF	KKESMK	SA-----	-----
HeleOBP13	-IMKSLPGTA	S-VKFD	NCQD	-IMD-----	T	DDCDRY	-FKM	SVCV	TKQISI	NE-----	-----
HeleOBP14	TADLGWFQSV	SDEIITK	CAG	EAKAAA	EKHK	DGCN	PSDLKF	AFCI	FKEIQL	NCPADQIKDQ	ARCEAMRESI
HeleOBP15	GIDNRELKDF	LQDSTDD	CFQ	LMEQDEH--	V	DHCYFS	-TQL	IKCL	AEKGKS	NCGDWPMTDL	PFHHIL----
HeleOBP16	-ELDEQITKD	LNIDFSK	CVP	-QKNI----	T	DPCEQT	-YVL	TRCM	FQLLFK	AAEKSA----	-----
HeleOBP4	-KVKLSVDAS	V-VDLNK	CTT	-VTD-----	S	DPCQQT	-YLI	ERIC	MDQLPK	QSM-----	-----
HeleOBP18	-VNALDPTIA	S-VDLQ	CCQG	-LTG-----	S	DNCERD	-YNI	LKCG	VGYML	KYKSKPQQ--	-----
HeleOBP19	-----SLFIY	L-PDSHK	CAN	-ITD-----	T	DVCQ	RG-YLI	ESC	IRKELRL	AVRL-----	-----
HeleOBP21	SIPSEDKDKS	YTEDA	IKSCQ	YVWTP----		TSDAIA	-YEF	FKCF	FRNKTDA	AAYWTTLKEL	SSKNDKQDVS
HeleOBP23	-VLDKMLKD	LKIDFSI	CVP	-QKNI----	T	DLCEQT	-HVL	TQCL	MLKLSVG	AVQKS-----	-----

HeleOBP2	-----
HeleOBP1	-----
HeleOBP5	-----
HeleOBP7	-----
HeleOBP9	-----
HeleOBP10	-----
HeleOBP11	-----
HeleOBP3	-----
HeleOBP6	-----
HeleOBP13	-----
HeleOBP14	KKYDHPPVH
HeleOBP15	-----
HeleOBP16	-----
HeleOBP4	-----
HeleOBP18	-----
HeleOBP19	-----
HeleOBP21	NVLVDFLL-
HeleOBP23	-----