

**Table S6: List of the potential HIV surface membrane factors inferred by our method, including their functional domains, cell types and references assessing an association with HIV.**

Receptor	InterPro domains	Cell types	Association with HIV
DARC	Duffy_cmk_rcpt.	High expression: (early) erythroid, endothelial cells	+ [1-3]
CCR1	7TM_GPCR_Rhodpsn, CC_1_rcpt	High expression: whole blood, monocytes, myeloid, dendritic cell	+ [4-6]
CCBP2	7TM_GPCR_Rhodpsn, CXC_4_rcpt	Uniform expression*	+ [7,8] - [9]
CD97	EGF-type_Asp/Asn_hydroxyl_site, EGF_Ca_bd_2, GPCR_2_CD97, GPCR_2_secretin-like, GPS_dom	High expression: CD34, B lymphoblast, dendritic cells, CD8 and CD4 T- cells, NK, myeloid, monocytes	+ [10]
GP1BB	LRR-contain_N, Cys-rich_flank_reg_C	High expression: CD34, monocytes and whole blood	?
HTR6	7TM_GPCR_Rhodpsn	Uniform expression	+
HTR1B	5HT1B_rcpt, 7TM_GPCR_Rhodpsn	Uniform expression	?
HTR1E	5HT1F_rcpt, 7TM_GPCR_Rhodpsn	Uniform expression	?
RXFP2	7TM_GPCR_Rhodpsn, LDL_rcpt_classA_cys-rich_rpt, Leu-rich_rpt, LRR-contain_N, Leu-rich_rpt_typical-subtyp, Relaxin_rcpt	Low expression	?
RXFP1	7TM_GPCR_Rhodpsn, LDL_rcpt_classA_cys-rich, Leu-rich_rpt, LRR-contain_N, Leu-rich_rpt_typical-subtyp, Relaxin_rcpt	No expression profiles available	?
GPR17	7TM_GPCR_Rhodpsn, P2_purnocptor	Uniform expression	?
GPR182	7TM_GPCR_Rhodpsn, G10D_rcpt	Uniform expression	?
NPBWR2	7TM_GPCR_Rhodpsn, Neuropept_W_rcpt	Uniform expression	- [11]
GYPB	Glycophorin	High expression: (early) erythroid and endothelial cells	?
CD2	Ag_CD2, Ig-like_fold, Ig_C2-set, Ig_V-set, T-cell_sdhesion_molc_CD2.	High expression: dendritic, myeloid, monocytes, NK, CD8 and CD4 T cells, whole blood	+ [12-15]

CSF3R	FN_III, Hematopoietin_rcpt_gp130_CS, IgC2-like_lig-bd	High expression: myeloid cells, monocytes and whole blood	+ [16,17]
IL1R1	Ig, Ig-like, Ig-like_fold, Ig_sub, IL1_rcpt_1, IL1R_rcpt	No expression profile available	- [18,19]
CD79B	Ig-like, Ig-like_fold, Ig_sub, Ig_V-set, Phos_immunorcpt_sig_ITAM.	High expression: CD34, endothelial and dendritic cells	+ [13,20]
IL6ST	FN_III, Hematopoietin_rcpt_gp130_CS, Ig-like_fold, IgC2-like_lig-bd	Uniform expression	+ [21-23]
TNFRSF5	Fas_rcpt, TNFR_Cys rich_reg	High expression: B lymphoblasts	+ [24-26]
TNFRSF3	TNFR_3_LTBR, TNFR_Cys rich_reg	High expression: myeloid, monocytes and whole blood	+ [27]

(\*): CD34, endothelial, B lymphoblasts, dendritic, myeloid, monocytes, NK, CD8 and CD4 T cells, whole blood

(+) Predictions with literature supporting an interaction with HIV are marked as (+).

(-) Indicates predictions with negative evidences.

(?) For predictions without literature on interaction or non-interaction the association remains unclear.

## References

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