

Supplemental Table 1: Proteins exclusively biotinylated by BirA*-Gag with known HIV-1 interactions

NCBI Accenssion	Protein Name	Gene Symbol	Implicated HIV-1 proteins (reference)
NP_005137.1	Squamous cell carcinoma antigen recognized by T cells	SART1	N/A [1]; Protease [2]
AAH17921.1	FSHD region gene 1 pseudogene	LOC283788	None
AAH14977.1	Metadherin (LYRIC)	MTDH	gp120 [3]; Gag [4-6]; Tat [7]; Vpr [8]
AAH20205.1 BAA91800.1	N-acetyltransferase 10 (GCN5-related)	NAT10	Gag [4]; Rev [9]
EAW47709.1	Ribosomal protein L27a pseudogene 6	RPL27AP6	None
EAW51024.1 EAW64492.1 AAH71674.1	Ribosomal protein S16	RPS16	Gag [10]
EAW51434.1	Integrator complex subunit 2	INTS2	None
EAW52801.1 AAA58683.1	Interferon, gamma-inducible protein 16	IFI16	Tat [11]; N/A [12-15]
EAW54849.1	M-phase phosphoprotein 9	MPHOSPH9	None
EAW55529.1	Histone cluster 1	HIST1H1T	Gag [16, 10]
EAW58635.1 AAA60288.1	Ribosomal protein S6	RPS6	N/A [1]; Rev [9]
EAW61735.1 EAW61737.1 BAG59473.1 BAG61214.1 AAH27252.1 CAB61367.2 BAD92554.1	Treacher Collins-Franceschetti syndrome 1	TCOF1	None
EAW68340.1	HIV-1 Tat interactive protein 2	HTATIP2	None
EAW68442.1	Ribosomal protein S2 pseudogene 40	RPS2P40	None
EAW70570.1	Ribosomal protein L37a	RPL37A	None
EAW75952.1	Ribosomal protein L27a	RPL27A	Gag [10]
EAW76708.1	hCG40355, isoform CRA_a	N/A	None
EAW90750.1	hCG1643303, isoform CRA_a, partial	N/A	None
EAW95067.1	Ribosomal protein L11	RPL11	Vpr [8]; Gag [10]
EAX02861.1	Ribosomal protein L36a	RPL36A	None
AAK07692.1	SON DNA binding protein	SON	None
NP_002943.2 BAB93525.1 AAH32129.1 AAH04520.2	Ribosomal protein S2	RPS2	N/A [1]; Rev [9]; Tat [17]
AAI50502.1	Ribosomal protein S3	RPS3	N/A [1]; Gag [10]
1WH9_A	Solution structure of the KH domain of human ribosomal protein S3	N/A	None
NP_000986.2	Ribosomal protein L34	RPL34	None
AAA35915.1	Guanylate cyclase activator 2A (guanylin)	GUCA2A	None
BAG60103.1	DEAD (Asp-Glu-Ala-Asp) box helicase 5	DDX5	N/A [1, 18]; Protease [2]; Vpr [8]; Rev [9, 19, 20]
AAH26155.1 BAA92075.1	Round spermatid basic protein 1	RSBN1	None
NP_001129606.1	Ribosomal protein L28	RPL28	Gag [10]
BAH14799.1 BAD92974.1	Methylcrotonoyl-CoA carboxylase 1 (alpha)	MCCC1	None
3FF6_A	Chain A, Human Acc2 Ct Domain With Cp-640186	ACACB	None
AAB87383.1	Chromodomain helicase DNA binding protein 3	CHD3	None
CAA45026.1	Actin, beta	ACTB	Env [21, 22]; Gag [23-25]; Nef [26, 27]; Rev [28, 29]; Tat [30]; Protease [31, 2, 32]; RT [33, 34]
NP_001186902.1	RPL36A-HNRNPH2 readthrough	RPL36A-	None

		HNRNPH2	
AAP94114.1	Acetyl-CoA carboxylase alpha	ACACA	Tat [35, 36]
XP_002343932	Protein FRG1-like isoform 1	LOC100289097	None
BAC85872.1	Round spermatid basic protein 1-like	RSBN1L	None
NP_006377.2	DEAD (Asp-Glu-Ala-Asp) box helicase 17	DDX17	N/A [1, 18]; Protease [2]; Rev [9, 19]; Gag [37, 10]
AAA52651.1	Histone cluster 1, H3b	HIST1H3B	Tat [38-41]
AAD16006.1	Eukaryotic translation initiation factor 5B	EIF5B	MA and Gag [10, 42]
NP_003617.1	Protein tyrosine phosphatase interacting protein (liprin), alpha 1	PPFIA1	None
NP_000981.1	Ribosomal protein L27a	RPL27A	Gag [10]
NP_004468.1	FSHD region gene 1	FRG1	Tat [17]
BAA83713.1 BAA83717.1	serine/arginine repetitive matrix 2	SRRM2	Tat [43]; N/A [44]
NP_009140.1	ribosomal protein L35	RPL35	Protease [2]; Gag [10]
BAD96826.1	ribosomal protein S5	RPS5	Rev [9]
CAA89008.1	ribosomal protein L29	RPL29	N/A [1]; Vpr [8]; Gag [10]

Protein specifically biotinylated by BirA*-Gag are indicated with NCBI accession number, protein name and gene symbol. The rightmost column lists references in which the protein has been identified as interacting with the indicated HIV-1 viral protein or implicated part of the virus life cycle. None, no previous reference; N/A, not applicable.

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