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**Table S1:** 178 VDR target genes

<b>Gene name</b>	<b>NCBI Gene ID</b>	<b>References (Pubmed ID)</b>	<b>DE</b>
<i>ABCA11</i>	79963	22782502, 21872797	
<i>ABCB1</i>	5243	22782502, 21872797	
<i>ABCD1</i>	215	22782502, 21872797	
<i>ADAMTS5</i>	11096	24247221	
<i>ADRA1B</i>	147	22782502, 21872797	
<i>ADRB2</i>	154	22782502, 21872797	
<i>ALOX5</i>	240	Feldman (2011), 19667142, 22213316, 20736230	
<i>ALP1</i>	248	22782502, 21872797	
<i>ALPPL2</i>	251	22782502, 21872797	
<i>ASAP2</i>	8853	23999061	
<i>ATP2B1</i>	490	21870057	UP
<i>ATP2C2</i>	9914	22782502, 21872797	
<i>BDKRBI</i>	623	24726990	
<i>BGLAP</i>	632	17721433, 22782502, 21872797	
<i>BMP6</i>	654	22782502, 21872797	
<i>BTLA</i>	151888	22213316	
<i>CA9</i>	768	22782502, 21872797	
<i>CALB1</i>	12307	21870057	
<i>CAMP</i>	820	16002434, 21872797, 22782502	
<i>CASP14</i>	23581	22782502, 16002434, 21872797	
<i>CASP5</i>	838	16002434	
<i>CBS</i>	875	21872797, 22782502	
<i>CCNC</i>	892	Feldman (2011), 19667142, 22213316, 17721433, 20736230	
<i>CCND1</i>	595	Feldman (2011)	
<i>CCNE1</i>	898	Feldman (2011)	
<i>CD14</i>	929	24854954, 23923049	UP
<i>CD200</i>	4345	22213316	
<i>CD40</i>	958	20736230	
<i>CD9</i>	928	24247221	
<i>CD97</i>	976	24854954	
<i>CDC34</i>	997	22782502, 21872797	
<i>CDK2</i>	1017	Feldman (2011)	
<i>CDKAL1</i>	54901	20736230	
<i>CDKN1A</i>	1026	Feldman (2011), 19667142, 22213316, 17721433, 21872797, 24202443, 22782502	
<i>CDKN1B</i>	1027	Feldman (2011), 19667142	
<i>CDKN2A</i>	1029	Feldman (2011)	
<i>CDKN2B</i>	1030	Feldman (2011)	UP
<i>CDKN2C</i>	1031	Feldman (2011)	DOWN
<i>CDKN2D</i>	1032	Feldman (2011)	DOWN
<i>CDX-2</i>	1045	22782502, 21872797	
<i>CEACAM1</i>	634	21872797	
<i>CEBPA</i>	1050	22782502, 21872797	
<i>CLDN2</i>	9075	22782502, 21872797	
<i>CLEC16A</i>	23274	20736230	
<i>CLMN</i>	79789	16002434	UP
<i>CLPTMIL</i>	81037	20736230	
<i>COL13A1</i>	1305	16002434	
<i>COLEC11</i>	78989	22782502, 21872797	

<i>CREG2</i>	200407	22782502, 21872797	
<i>CST1</i>	1469	22782502, 21872797	
<i>CST6</i>	1474	16002434	
<i>CTLA4</i>	1493	20736230	
<i>CYP11A1</i>	1543	22782502, 21872797	
<i>CYP24A1</i>	1591	Feldman (2011), 19667142, 22213316, 17721433, 24726990, 21872797, 22782502	UP
<i>CYP27B1</i>	1594	Feldman (2011), 19667142, 22213316, 23923049, 17721433, 24726990, 22782502	
<i>CYP2B6</i>	1555	11991950	
<i>CYP2C9</i>	1559	11991950	
<i>CYP2D6</i>	1565	22782502, 21872797	
<i>CYP2S1</i>	29785	22782502, 21872797	UP
<i>CYP3A4</i>	1576	15205382, 11991950, 21872797, 22782502, 16002434	
<i>CYP3A43</i>	64816	22782502, 21872797	
<i>CYP3A5</i>	1577	22782502, 21872797	UP
<i>DACT2</i>	168002	22782502, 21872797	
<i>DEFB109</i>	100286963	22782502, 21872797	
<i>DEFB132</i>	400830	22782502, 21872797	
<i>DEFB4</i>	1673	16002434	
<i>DND1</i>	373863	22782502, 21872797	UP
<i>DNER</i>	92737	22782502, 21872797	
<i>DUSP10</i>	11221	24975273, 22782502, 21872797	
<i>EFCAB4A</i>	283229	22782502, 21872797	
<i>EFCAB4B</i>	84766	22782502, 21872797	
<i>EFNA5</i>	1946	22782502, 21872797	
<i>EPHB4</i>	2050	22782502, 21872797	
<i>FGF23</i>	8074	Feldman (2011), 21872797, 22782502, 21870057	
<i>FOXO1</i>	2308	16002434, 21872797, 22782502	
<i>G0S2</i>	50486	24202443	
<i>G6PD</i>	2539	22782502, 21872797	UP
<i>GADD45A</i>	1647	Feldman (2011), 17721433, 16002434	
<i>GLT8D4</i>	727936	22782502, 21872797	
<i>HIF1A</i>	3091	16002434	
<i>HILPDA</i>	29923	24247221	
<i>HLA-DQA1</i>	3117	20736230	
<i>HLA-DRB1</i>	3123	20736230	
<i>HNF1A</i>	6927	22782502, 21872797	
<i>HSD17B2</i>	3294	16002434	UP
<i>ID1</i>	3397	22782502, 21872797	
<i>ID4</i>	3400	24726990	
<i>IGFBP1</i>	3484	16186133, Feldman (2011), 19667142, 22213316	UP
<i>IGFBP3</i>	3486	16186133, Feldman (2011), 19667142, 22213316, 24726990	
<i>IGFBP5</i>	3488	16186133, Feldman (2011), 19667142, 22213316	
<i>IGSF9B</i>	22997	22782502, 21872797	
<i>IL12A</i>	3592	24726990	
<i>IL1RL1</i>	9173	16002434, 24726990	
<i>IL25</i>	64806	22782502, 21872797	
<i>IRF4</i>	3662	20736230	
<i>IRF5</i>	3663	20736230	
<i>IRF8</i>	3394	22782502, 21872797	
<i>JUNB</i>	3726	22782502, 21872797	
<i>KL</i>	9365	21872797, 22782502	

<i>KLF4</i>	9314	24726990	
<i>KLK6</i>	5653	16002434	UP
<i>KNG1</i>	3827	22782502, 21872797	
<i>KRT13</i>	3860	22782502, 21872797	
<i>KRT16</i>	3868	22782502, 21872797	UP
<i>KRT34</i>	3885	22782502, 21872797	
<i>KRT38</i>	8687	22782502, 21872797	
<i>KRT71</i>	112802	22782502, 21872797	
<i>KRTAP10-2</i>	386679	22782502, 21872797	
<i>KRTAP10-4</i>	386672	22782502, 21872797	
<i>KRTAP10-7</i>	386675	22782502, 21872797	
<i>KRTAP10-9</i>	386676	22782502, 21872797	
<i>KRTAP12-2</i>	353323	22782502, 21872797	
<i>KRTAP4</i>	85285	22782502, 21872797	
<i>KRTAP5-1</i>	387264	22782502, 21872797	
<i>KRTAP5-4</i>	387267	22782502, 21872797	
<i>KRTAP8-1</i>	337879	22782502, 21872797	
<i>LCE-ID</i>	353134	22782502, 21872797	
<i>LCE-IF</i>	353137	22782502, 21872797	
<i>LCE-2B</i>	26239	22782502, 21872797	
<i>LGALS9</i>	3965	22782502, 21872797	
<i>LRP5</i>	4041	21872797, Feldman (2011), 19667142, 22213316, 22782502	
<i>LRRC25</i>	126364	22213316	
<i>MED9</i>	55090	22782502, 21872797	
<i>MEG8</i>	79104	22782502, 21872797	
<i>MX2</i>	4600	22782502, 21872797	
<i>MXD1</i>	4084	16002434	
<i>MYC</i>	4609	24202443, Feldman (2011), 16002434	
<i>MYO9B</i>	4650	22213316	
<i>NFATC2</i>	4773	22782502, 21872797	
<i>NINJI</i>	4814	22213316	
<i>NOX1</i>	27035	22782502, 21872797	UP
<i>NRIP1</i>	8204	24975273, 24854954	
<i>ORM1</i>	5004	22782502, 21872797	UP
<i>ORM2</i>	5005	22782502, 21872797	UP
<i>PNOC</i>	5368	22782502, 21872797	
<i>PPARD</i>	5467	Feldman (2011), 19667142	
<i>PRDM1</i>	639	20736230	
<i>PRKCQ</i>	5588	20736230	
<i>PTGER4</i>	5734	20736230	
<i>PTH</i>	5741	Feldman (2011), 23923049, 17721433, 24726990, 21872797, 22782502	
<i>PTHLH</i>	5744	21872797, 22782502	
<i>RASGRP1</i>	10125	20736230	
<i>S100A2</i>	6273	16002434, 22782502	
<i>S100A4</i>	6275	22782502, 21872797	
<i>S100A6</i>	6277	22782502, 21872797	
<i>S100A8</i>	6279	22782502, 16002434, 21872797	
<i>S100A9</i>	6280	22782502, 21872797	
<i>S100G</i>	795	21870057	
<i>SALL4</i>	57167	22782502, 21872797	
<i>SATB1</i>	6304	24726990	

<i>SEMA3B</i>	7869	16002434	
<i>SERPINB1</i>	1992	16002434	
<i>SFRP1</i>	6422	22782502, 21872797	
<i>SLC2A4</i>	6517	24247221	UP
<i>SLC34A2</i>	10568	Feldman (2011), 21870057	
<i>SLC37A2</i>	219855	24854954, 22213316	
<i>SLC8A1</i>	6546	21870057	
<i>SOSTDC1</i>	25928	21872797, 22782502	
<i>SPP1</i>	6696	21872797, 22782502	
<i>SPRR1B</i>	6699	22782502, 21872797	
<i>STAM</i>	8027	20736230	
<i>STEAP4</i>	79689	24247221	UP
<i>SULT1C2</i>	6819	22782502, 21872797	UP
<i>SULT2A1</i>	6822	14978251, 16399349, 22782502	
<i>TGFB1</i>	7040	24247221	
<i>TGFB2</i>	7042	22782502, 21872797	
<i>THBD</i>	7056	24975273, 24247221, 22213316, 23923049	
<i>TIMP2</i>	7077	22782502, 21872797	
<i>TIMP3</i>	7078	22782502, 21872797	
<i>TNFAIP3</i>	7128	20736230	UP
<i>TNFRSF11B</i>	4982	21870057	
<i>TNFSF11</i>	8600	Feldman (2011), 19667142, 22213316, 21872797, 21870057, 22782502	
<i>TNFSF4</i>	7292	20736230	
<i>TPM1</i>	7168	24247221	
<i>TRAK1</i>	22906	24975273	
<i>TRPV5</i>	56302	16002434, 21870057	
<i>TRPV6</i>	55503	Feldman (2011), 24726990, 16002434, 22782502, 21872797	UP
<i>ZNF257</i>	113835	22782502, 21872797	