



## **MOLECULE CONCENTRATION FACTS**

11B-HSD1	620
2B4	430
4-1BB	1,408
ABL1	2,850
ACE	818
ACE-2	1,610
ACK1	3,217
ACPP	877
ACTH	1,384
ADAM-9	875
NEUROKININ-A	1,352
ADAMTS-1	814
ADAMTS-L2	2,188
ADAMTS-4	2,932
ADAMTS-5	910
ADAMTS-10	769
ADAMTS-13	833
ADAMTS-15	750
ADAMTS-17	1,843
ADAMTS-18	684
ADAMTS-19	1,561
ADIPSIN	4,670
AFAMIN	598
AFP	13,094
ALBUMIN	235,944

IL-36RN	732
ALDOLASE A	3,203
ALDOLASE B	724
ALDOLASE C	732
ALK	1,987
ALPHA LACTALBUMIN	6,789
ALPHA 1 AG	1,210
A1BG	8,301
ALPHA 1 MICROGLOBULIN	22,440
A2M	843
TPM1	680
ALPP	5,922
PRO-MMP13	697
AMICA	1,458
AMPKA1	833
AMYLIN	6,203
ANGPTL3	1,204
ANGPTL4	841
ANNEXIN A7	797
APC	1,963
APCS	1,831
APELIN	2,501
APEX1	1,349
APN	1,457
APOA1	1,954
APOA2	3,946
APOA4	36,890
APOB	790
APOC2	757
APOB100	652

APOE3	798
APOD	895
A POM	803
APOH	793
APP	4,321
ASPH	2,402
ATTRACTIN	1,216
B3GNT1	1,133
BAF57	1,239
BAFF	1,342
BAI-1	9,035
BCAM	1,983
BETA 2M	2,350
BETA DEFENSIN 4	1,105
BETA IG-H3	8,542
BIGLYCAN	819
BLAME	911
BMP-9	819
BMX	1,376
BNIP2	990
BTK	1,548
APOC1	2,671
CA 9	1,355
CA 15-3	1,920
CA 19-9	5,440
CA 125	2,694
CADHERIN-13	907
CLEC14A	5,432

CALBINDIN D	898
CALCITONIN	8,322
CALRETICULIN	786
CALSYNTENIN-1	731
CPN2	9,129
CART	2,698
CASPASE-3	555
CASPASE-8	994
CATHEPSIN B	993
CATHEPSIN D	790
CATHEPSIN L	934
CATHEPSIN S	950
CBP	2,451
CCK	1,624
CD23	708
CD24	1,033
CD36	1,193
CD38	1,213
CD44	1,410
CD45	999
CD46	1,766
CD47	1,346
CD55	945
CD59	2,094
CD71	2,954
CD74	28,563
CD90	2,121
CD97	1,432
CD 79 ALPHA	2,031

CD200	844
CEA	1,854
CEACAM-1	1,544
CERULOPLASMIN	3,766
CFHR2	798
CHEMERIN	1,235
CHI3L1	1,765
CHROMOGRANIN A	3,019
CHYMASE	1,343
CIAP-2	688
CK BETA 8-1	690
CK-MB	18,321
CLAUDIN-3	1,452
CLAUDIN-4	1,790
CLEC3B	11,493
CLUSTERIN	2,943
CNDP1	2,333
FC GAMMA RIIB	4,093
FACTOR XIII B	809
COCO	911
C2	3,988
C3A	999
C5/C5A	822
C7	2,021
C8B	900
C9	1,908
COMPLEMENT FACTOR H	598
CONTACTIN-1	3,679
CONTACTIN-2	1,276

<b>CORTICOSTEROID-BINDING GLOBULIN</b>	6,754
<b>COX-2</b>	1,235
<b>C-PEPTIDE</b>	3,099
<b>CREATININE</b>	3,983
<b>CRP</b>	2,313
<b>CRTAM</b>	899
<b>CSH1</b>	874
<b>GAMMA-THROMBIN</b>	717
<b>CUTA</b>	954
<b>CTNT</b>	1,594
<b>CYCLIN D1</b>	1,222
<b>CYSTATIN A</b>	1,456
<b>CYSTATIN B</b>	4,986
<b>CYSTATIN C</b>	1,444
<b>CYTOCHROME C</b>	1,122
<b>CYTOKERATIN 8</b>	1,322
<b>CYTOKERATIN 18</b>	1,202
<b>CYTOKERATIN 19</b>	2,326
<b>DBI</b>	1,124
<b>DCBLD2</b>	654
<b>D-DIMER</b>	2,654
<b>DEFA1/3</b>	1,044
<b>CPA1</b>	2,954
<b>DESMIN</b>	819
<b>DLL1</b>	996
<b>DLL4</b>	879
<b>DMP-1</b>	779
<b>DPPIV</b>	1,222
<b>BNP</b>	4,232

E-CADHERIN	865
ENDORPHIN BETA	10,966
ENDOTHELIN RECEPTOR A	2,786
ENOLASE 2	1,990
ENPP2	3,110
EPCAM	865
EPHA1	2,995
EPHA2	1,653
EPHA3	1,435
EPHA4	2,976
EPHA5	3,433
EPHA6	677
EPHA7	4,907
EPHA8	1,843
EPHB1	2,562
EPHB2	1,753
EPHB3	6,321
EPHB4	712
EPHB6	901
ERRA	1,320
ERYTHROPOIETIN R	704
ESAM	911
EV15L	1,761
EXTL2	4,913
FABP1	922
FABP2	754
FABP4	1,235
FAK	1,833
FAP	1,665

FC RIIB/C	986
FEN 1	9,543
FER	5,688
FERRITIN	2,879
FETUIN A	1,854
FETUIN B	954
FGFR1	2,965
FGFR1 ALPHA	2,986
FGFR2	955
FIBRINOGEN	3,094
FIBRINOPEPTIDE A	1,741
FIBRONECTIN	685
FICOLIN-3	986
FIH	1,110
FOLR1	1,099
FOXN3	2,343
FOXO1	733
FOXP3	791
FRK	7,686
ARBI	1,679
FURIN	1,865
FYN	1,490
GADD45A	2,092
GALECTIN-1	4,985
GALECTIN-3BP	1,345
GALECTIN-7	898
GAST	956
GASTRIN	5,088
GATA-3	978



GATA-4	599
GELSOLIN	1,383
GHRELIN	1,782
GLP-1	2,204
GPI	1,231
GPBB	1,333
GMNN	2,833
GPR-39	1,892
GPX1	1,032
GPX3	2,220
PANCREASTATIN	1,216
GRP	1,654
GRP75	833
GRP78	888
GSR	1,800
GST	7,294
HADHA	1,787
HAI-1	1,056
HAI-2	590
HCG ALPHA	2,437
HCGB	1,855
HCK	7,797
HE4	2,576
HEMOPEXIN	1,457
HEPCIDIN	1,905
HSP32	1,941
HOXA10	1,541
HAPTOGLOBIN	4,954
HSP10	1,535

HSP20	2,987
HSP27	14,983
HSP40	1,565
HSP60	1,955
HSP70	2,877
HSP90	1,685
HSPA8	1,385
HTRA2	1,346
IBSP	1,688
IGF2BP1	1,679
IGFBP-5	1,116
IDUA	3,445
IL-33	1,542
IL-34	1,570
INSRR	2,096
INTEGRIN ALPHA V	2,684
CD61	1,995
ITK	10,944
ITM2B	3,965
KALLIKREIN 2	3,886
APOC3	1,538,449
KALLIKREIN 5	2,844
KALLIKREIN 6	2,544
KALLIKREIN 7	2,099
KALLIKREIN 8	1,685
KALLIKREIN 10	2,544
KALLIKREIN 11	1,996
KALLIKREIN 14	1,433
KCC3	1,670

KCTD10	1,193
KIF3B	1,330
KLF4	1,765
LAG-3	5,877
PRO-GLUCAGON	1,568
LAYILIN	1,890
LDL R	9,549
LEGUMAIN	1,680
LH	2,891
LIMPII	1,110
LIN41	1,298
LIVIN	1,978
LOX-1	1,287
LPS	2,655
LRG1	3,909
LTF	12,125
LTK	3,110
LUMICAN	1,391
LYN	5,902
LYRIC	2,905
LYVE-1	1,858
LZTS1	1,181
MAMMAGLOBIN A	14,091
MARAPSIN	1,569
MATK	11,307
MBL	1,877
CIQTNFI	42,980
MER	1,303
MESOTHELIN	1,789

MICB	11,335
MIDKINE	1,322
MINA	7,907
FABP3	1,235
MSHA	3,908
MTUS1	2,135
MYOGLOBIN	1,891
NAIP	1,990
NANOG	967
NELL2	2,079
NEP	1,698
GALANIN	2,909
NESFATIN	1,544
NESTIN	1,809
NET1	2,690
NETRIN G2	7,903
NETRIN-4	1,689
NEUROPEPTIDE Y	2,568
NF1	3,654
NM23-H1/H2	1,560
PRESENILIN 2	1,342
NOTCH-1	1,542
NPTX1	9,433
NPTXR	1,811
PROGESTERONE	1,864
NTN1	2,995
OCT3/4	1,342
OMENTIN	1,542
OSTEOCALCIN	1,754

OSTEOPONTIN	1,864
OX40	1,530
P21	2,895
P27	1,139
P53	1,853
PAI-1	2,325
PAK7	1,564
PAPPALYSIN-1	1,233
PANCREATIC POLYPEPTIDE	2,343
PRESENILIN 1	1,653
PARK7	789
VISFATIN	974
P-CADHERIN	1,343
PCAF	3,765
PD-1	1,343
PTH	25,513
TROPONIN C	8,321
PDX-1	1,345
PEDF	1,450
PEPSINOGEN I	1,431
PEPSINOGEN II	1,651
VASOPRESSIN	2,084
PGRP-S	1,236
PI 16	4,013
PI 3KINASE P85 BETA	7,063
PIM2	19,320
PKM2	1,543
PLASMINOGEN	1,792
PODOCALYXIN	2,325

POMC	2,694
PON1	1,560
PON2	1,459
PPARG2	3,343
PPP2R5C	2,569
NR3C3	3,564
INSL3	1,873
PRO-BDNF	1,542
PROCALCITONIN	2,193
PRO-CATHEPSIN B	1,039
THROMBIN	995
PROHIBITIN	1,786
PROSAAS	2,985
PROSTASIN	1,673
PSP	1,641
PRO-MMP-7	1,789
PRO-MMP-9	2,078
PROTEIN P65	1,569
PSA-FREE	2,653
PSA-TOTAL	1,395
PTHLP	2,065
PTN	1,340
PTPRD	5,684
PYK2	1,895
PYY	1,906
RAS	1,670
RBP4	2,569
RECK	1,843
RELM ALPHA	1,585

RESISTIN	1,892
RET	3,933
RIP1	1,904
ROCK1	3,793
ROCK2	1,574
ROR1	1,795
ROR2	15,033
ROS	1,903
RYK	1,753
S100A4	1,120
S100A6	24,591
S100A8	2,644
S-100B	2,953
SART1	1,249
SART3	1,544
SCG3	1,555
SELENOPROTEIN P	26,560
SEMA3A	906
SEROTONIN	3,595
SERPIN A1	1,204
SERPIN A12	1,955
SERPIN A3	1,954
SERPIN A4	6,544
SERPIN A5	1,354
SERPIN A8	1,394
SERPIN A9	1,943
SERPIN B5	1,834
SERPIN D1	1,060
SERPIN I1	484

SERPING1	2,694
SERTAD2	1,560
SHBG	3,954
SMAC	1,953
SNCG	1,459
SSTR5	1,594
SCGF	1,875
SOST	1,697
SOX17	1,348
SOX2	1,631
SPARCL1	4,493
SPINK1	1,943
SRMS	6,933
SSEA-1	1,073
SSEA-4	3,123
SSTR2	1,230
SURVIVIN	1,212
SYK	2,985
SYNDECAN-1	1,233
SYNDECAN-3	1,035
TACE	984
TAF4	1,232
TYK2	1,236
TEC	4,121
TFF3	1,624
THROMBOMODULIN	1,739
THYMIDINE KINASE-1	2,433
THYROGLOBULIN	2,486
TIM-1	1,054



TNK1	6,294
TOPORS	1,854
TPA	1,954
TRA-1-60	9,121
TRA-1-81	4,124
TRANSFERRIN	1,444
TRAPPIN-2	875
TRKB	2,199
TROPONIN I	1,983
TYRO10	7,330
TRPC1	1,542
TRPC6	1,350
TRPM7	1,843
TRYPSIN 1	1,818
TSH	3,158
TSLP	1,213
TXK	4,958
UROMODULIN	1,573
TFF1	1,204
VDUP-1	1,958
VEGF R1	1,777
VGF	2,430
VIP RECEPTOR 2	1,432
VITAMIN D RECEPTOR	4,330
VITAMIN D-BP	6,974
VITAMIN K-DEPENDENT PROTEIN S	2,433
VITRONECTIN	2,322
VWF	4,983
WILMS TUMOR 1	2,129
XIAP	1,213
ZAG	9,350
ZAP70	3,897



## WHARTON'S JELLY + MATRIX FACTORS & CONCENTRATION

Description	pg/mL	Description	pg/mL	Description	pg/mL
2B4	145	Fetuin A	98,972	MMP-10	123
ACE-2	29,191	aFGF	225	MMP-13	2,162
Activin A	455	FGF2	262	MSP	119
ADAM9	517	FGF4	159	Neprilysin	7,950
ADAM12	135	Follistatin	4,493	NCAM-1	595
Adiponectin	29,928	FLRG	12,872	Nidogen-1	15,087
Adipsin	748	Follistatin-like 1	925	NOV	2,933
AFP	1,685	FSH	175	NSE	8,835
AgR P	184	Furin	382	OPN	26,995
Albumin	139	Galectin-1	3,629	Osteoactivin	152
ALCAM	470	Galectin-3	409	PAI-1	3,139
AMICA	365	Galectin-7	6,752	P-Cadherin	16,992
Angiogenin	616	Galectin-9	164	PD-1	101
Angiotensinogen	292,397	GASP-1	145	PECAM-1	300
ANGPTL3	318	G-CSF	111	Pentraxin 3	1,099
ANGPTL4	721	GDF-15	387	Periostin	7,555
ANG-1	656	Granulysin	973	Persephin	1,361
Angiostatin	27,131	GROa	4,878	PF4	6,297
Axl	210	gp130	2,795	PGRP-S	1,342
B2M	246	HCC-1	1,560	Pref-1	7,272
B7-H3	170	hCGB	5,592	Prolactin	2,191
BCAM	849	HAI-2	112	Prostasin	152
bIG-H3	10,695	HGF	295	RAGE	318
BMP-5	1,256	HGF R	200	RANK	4,131
C5a	216	ICAM-1	1,633	RBP4	3,231
CA9	213	ICAM-2	643	Renin	707
CA19-9	15,393	IGF-1	124	Serpin A4	3,444
CA125	8,174	IGF-1R	935	SCF R	111
Cadherin-13	206	IGFBP-1	2,302	sFRP-3	978
Cathepsin B	5,532	IGFBP-2	5,204	Shh-N	123
Cathepsin L	350	IGFBP-3	59,665	Siglec-5	724
Cathepsin S	347	IGFBP-4	5,563	Siglec-10	8,925
CD6	1,403	IGFBP-5	979	SIGIRR	448
CD14	2,593	IGFBP-6	3,357	SOST	213
CD84	1,110	IL-1 F5	575	Syndecan-1	925
CD97	65,696	IL-1 F7	1,287	TACE	151
CD99	1,109	IL-1 F9	488	TACI	3,172
CD163	16,982	IL-1 RII	224	TF	769
CD200	892	IL-1 R3	803	TFPI	7,770
CEA	611	IL-1 R6	202	TGFa	122
CF XIV	1,249	IL-1 ra	323	TGFb1	14,572
Chemerin	879	IL-2 ra	596	TGFb2	464

CHI3L1	1,383	IL-2 rb	2,379	TGFb RIII	265
Clusterin	470	IL-5 ra	277	Thrombomodulin	3,147
CXCL14	2,352	IL-6R	123	Thrombospondin-2	680
CXCL16	169	IL-10 ra	9,862	Thrombospondin-5	4,624
Cystatin B	617	IL-13 R1	408	Thyroglobulin	3,212
Cystatin C	7,684	IL-17B	1,508	Tie-2	400
DAN	179	IL-17B R	375	TIMP-1	1,031
DcR 3	396	IL-17E	160	TIMP-2	2,111
Decorin	1,112	IL-20	304	TLR2	642
Desmoglein 2	938	IL-23	4,217	TPO	483
DNAM-1	102	IL-29	217	Trappin-2	583
Dkk-1	273	Legumain	412	TRAIL R4	195
Dkk-3	22,975	LDL R	268	TRANCE	1,493
DPPIV	24,348	LIGHT	119	Transferrin	3,496
DR3	733	Lipocalin-2	254	TNF RI	1,229
DR6	167	LRP-6	352	TNF RII	768
E-Cadherin	449	LYVE-1	418	TREM-1	839
EDA-A2	216	MBL	702	TSP-1	64,976
EGF R	671	MCSF R	631	uPA	158
EMMPRIN	373	MEPE	132	uPAR	1,707
Endoglin	116	Mer	277	VCAM-1	7,307
ESAM	155	Midkine	559	VE-Cadherin	1,572
FABP2	115	MIF	15,035	VEGF-C	144
FAP	2,681	MIP-1d	173	VEGF R1	2,434
Fas	462	MMP-2	221	WISP-1	165
Fcg RIIBC	1,138	MMP-8	108		
Ferritin	4,426,943	MMP-9	644		

Representative list of over 200 cytokines, growth factors, proteases, soluble receptors and other proteins present in an array characterization of WJ Matrix, as analyzed by Raybiotech.