

Predicting Ovarian Cancer Patients' Clinical Response to Platinum-based Chemotherapy by their Tumor Proteomic Signatures

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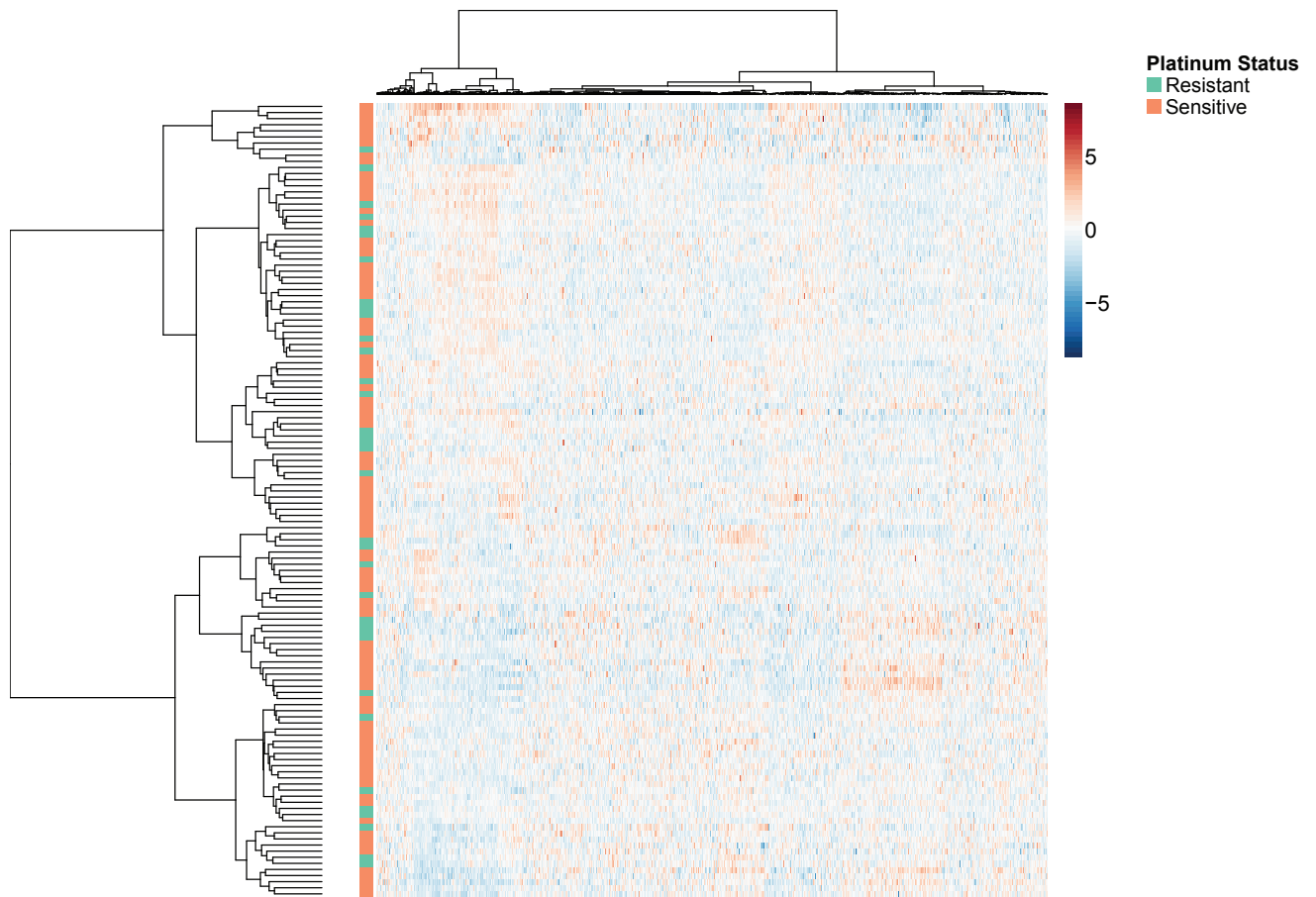


Figure S-1. Global proteomic profiles of ovarian serous carcinoma patients. This heatmap shows the log-transformed protein abundance. Each row indicates the proteomic profile of a patient, and each column represents the expression level of a protein. Although some patients with the same platinum response status had similar proteomic profiles, the global proteomic patterns did not predict platinum resistance.

Table S-1. Clinical Profiles of the Participating Ovarian Serous Carcinoma Patients

Patient Barcode	Platinum Free Interval (months)	Platinum Status	Anatomic Organ Subdivision	Chemotherapy	Days to Initial Pathologic Diagnosis	Histological Type	Informed Consent Verified	Pretreatment History	Race	Tumor Stage
TCGA-09-2056	7.6	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1404	43.5	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1409	17.53	Sensitive	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1410	6.37	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-13-1482	14.8	Sensitive	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-13-1483	1.9	Resistant	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1484	10.1	Sensitive	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1485	0.7	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-13-1487	6.7	Sensitive	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-13-1488	6	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-13-1489	17.5	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1492	117.67	Sensitive	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1494	16.8	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-13-1495	27.5	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1497	20.6	Sensitive	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1499	13	Sensitive	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1500	1	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1501	6.9	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-13-1504	8.77	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1507	5.47	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-1511	8.97	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	ASIAN	IV
TCGA-13-2059	28.23	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC

TCGA-13-2060	44.29	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-13-2061	60.43	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-13-2065	26.83	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	BLACK OR AFRICAN AMERICAN	IIIC
TCGA-13-2066	28.63	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-13-2071	5.87	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-23-1121	70.3	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	[Not Available]	IIIC
TCGA-23-1122	6.7	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-23-1124	14.7	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1103	17.96	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	BLACK OR AFRICAN AMERICAN	IIIC
TCGA-24-1104	25.61	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-24-1105	9.48	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1416	5	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-24-1428	10.6	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1430	11.2	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1431	1.7	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1435	11.7	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1464	5.2	Resistant	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1466	11.4	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1467	97.5	Sensitive	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1474	6.9	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	BLACK OR AFRICAN AMERICAN	IIIC
TCGA-24-1544	14.5	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	BLACK OR AFRICAN AMERICAN	IIIC
TCGA-24-1545	19	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1548	2.8	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1550	23.6	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1551	20.6	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1552	4.11	Resistant	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1553	13.1	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIB
TCGA-24-1557	5.5	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1558	0.8	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1562	2.5	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1563	8.3	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	BLACK OR AFRICAN AMERICAN	IIIC
TCGA-24-1565	0.7	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1920	16.27	Sensitive	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1923	3.52	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-1927	5.23	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC

TCGA-24-2024	9.8	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	BLACK OR AFRICAN AMERICAN	IIIC
TCGA-24-2027	11.63	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-24-2030	16.95	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-2033	3.77	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-2260	17.37	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIB
TCGA-24-2267	9.77	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIB
TCGA-24-2289	12.52	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-24-2290	6.66	Sensitive	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-2295	4.93	Resistant	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-24-2298	8.37	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-1313	8	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-25-1316	1.9	Resistant	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-1318	2.1	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-1320	8	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-1321	9	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-1323	7.9	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-1623	6.7	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-25-1628	3.5	Resistant	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-1635	12.5	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-2399	1.9	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-2400	12.85	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-25-2404	9.9	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	AMERICAN INDIAN OR ALASKA NATIVE	IIIC
TCGA-25-2409	3.9	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-29-1693	16.4	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1696	5.6	Resistant	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1697	10.4	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1698	-1.8	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	BLACK OR AFRICAN AMERICAN	IIIC
TCGA-29-1702	2.9	Resistant	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1705	3.71	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1710	8.77	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1711	30.1	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	BLACK OR AFRICAN AMERICAN	IIIC
TCGA-29-1762	40.6	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-29-1763	10.8	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	BLACK OR AFRICAN AMERICAN	IIC
TCGA-29-1766	15.9	Sensitive	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1768	14.6	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV

TCGA-29-1769	18	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1770	7.9	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1771	14.9	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1774	6.5	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1775	5.7	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-1785	10.4	Sensitive	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-2414	13.73	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-2431	27.4	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-29-2432	0.53	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-30-1866	5.2	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-30-1891	1.3	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-36-1570	8	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-36-1571	6.6	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIB
TCGA-36-1576	19.5	Sensitive	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	[Not Available]	IIIC
TCGA-36-1577	23.3	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	ASIAN	IIC
TCGA-36-1578	3.1	Resistant	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	ASIAN	IV
TCGA-36-1580	3	Resistant	[Not Available]	YES	0	Serous Cystadenocarcinoma	YES	NO	[Not Available]	IIIC
TCGA-36-1581	18.5	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIC
TCGA-36-2529	14.37	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	[Not Available]	IIIC
TCGA-36-2530	16.5	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	ASIAN	IIIC
TCGA-36-2534	7.63	Sensitive	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-36-2537	10.2	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	[Not Available]	IIIC
TCGA-36-2542	16.83	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	ASIAN	IIIB
TCGA-36-2544	6.57	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	[Not Available]	IIIC
TCGA-36-2545	13.73	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	[Not Available]	IIIA
TCGA-42-2588	0.73	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-61-1727	13.7	Sensitive	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IC
TCGA-61-1741	10.1	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIB
TCGA-61-1907	19.1	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-61-1910	31.7	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIC
TCGA-61-1911	23	Sensitive	Left	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIA
TCGA-61-1914	48.6	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	[Not Available]	IIIC
TCGA-61-1915	63	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIC
TCGA-61-1918	8.7	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IV
TCGA-61-2008	22	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	ASIAN	IIC

TCGA-61-2094	66.2	Sensitive	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC
TCGA-61-2096	11.4	Sensitive	Right	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IC
TCGA-61-2612	0.93	Resistant	Bilateral	YES	0	Serous Cystadenocarcinoma	YES	NO	WHITE	IIIC

Table S-2. Proteins with significant abundance differences between platinum sensitive and platinum resistant patients.

Protein Name	Mean Log2- Abundance in Platinum Resistant Patients	Mean Log2- Abundance in Platinum Sensitive Patients	P-value
RANBP1	-0.22656985	0.017876518	0.0000902
TPMT	-0.176599179	0.104756336	0.001036257
XP_003403878	-0.501894751	-0.027330854	0.001495694
LDHAL6A	0.125195932	-0.128106934	0.00169655
SARS2	0.113472727	-0.197092395	0.002544036
XP_001716274	-0.634090967	-0.215157026	0.002970108
KRT19	0.084616757	-0.229646258	0.003125997
KRT15	0.018890798	-0.30724076	0.005148307
KRT13	0.057185437	-0.31700448	0.005232576
NDUFA4	0.069992474	-0.177570002	0.005318089
RDH13	0.224849399	-0.024663431	0.006761351
BCAT1	-1.523569674	-0.891530395	0.006869059
ACTN4	0.147854342	-0.136281477	0.006869059
XP_003403926	-0.34088437	-0.054526625	0.006869059
NP_001156363	-0.048293032	0.302021514	0.007548297
KRT20	0.090482799	-0.231880003	0.007910001

XP_003403669	-0.403262397	-0.085636809	0.008680312
BCAT1	-1.591362142	-0.95863972	0.00909006
KRT4	0.107627698	-0.281399794	0.009516989
MT1G	-0.090150808	-0.64065696	0.009516989
MT1X	-0.090152833	-0.636783401	0.009663222
MT2A	-0.082340334	-0.609471008	0.009663222
IPLL5	-0.571637757	-0.206650432	0.012291173
MT1M	-0.140335909	-0.684681433	0.01509093