Electronic Supplementary Material (ESI) for RSC Advances.

Inhibitory effect of Zey on cancer cells after Zey treatment for 48 h.

Cell lines	**IC50 (μM)**
Reh	2.76
RS4;11	0.36
HL-60	2.07
Jurkat	1.59
Molt-4	2.31
Astrocyte	7.52
Raji	2.22
U251	4.84
U87	5.05
U373	4.25
CHO	23.61
L02	24.33
PBMC	43.25

Report of Human Cell Line Authentication

Delivery Date: September 05th ,2016

Analysis Date: September 09th ,2016

Ⅰ. Sample

Sample Name: 'XB4628', labeled as 'K-562', and was received on September 05th ,2016.

Ⅱ. Method and Procedure

1. PCR is amplified with STR Multi-amplification Kit (Microreader™21 ID System);
2. PCR products are assayed with ABI 3730xl DNA Analyzer (Applied Biosystems®).
3. Data were analyzed using GeneMapper3.2 software and then compared with the ATCC and DSMZ databases for reference matching.

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Ⅲ. Results

1. The results of the negative and positive control match expectations.
2. The STR profiles of the cell line sample are in the attached table and figure.

Genetic Site	ATCC				Customer sample				
(Locus)	Database profile：K-562				Query profile：K-562				
Amelogenin	X				X				
D5S818	11	12			11	12			
D13S317	8				8				
D7S820	9	11			9	11			
D16S539	11	12			11	12			
vWA	16				16				
TH01	9.3				9.3				
TPOX	8	9			8	9			

CSF1PO	9	10			9	10			
Number of shared alleles between query sample and database profile									14
Total number of alleles in the database profile								14	
Percent match between the query and the database profile：								100%	

K-562: ①No cross-contamination of other human cell line is found. ②The submitted profile is an 100% match for the following ATCC human cell line(s) in the ATCC STR database (8 core loci plus Amelogenin): K-562.100% matched cell lines are found in DSMZ data bank.

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Notes：

1. Based on the ANSI Standard, cell lines with ≥80% match are considered to be related; i.e.,derived from a common ancestry. Cell lines with between a 55% to 80% match require futher profiling for authentication of relatedness.

2. The short tandem repeat (STR) profile generated by Beijing Microread Genetics Co., Ltd is indicative only of the sample sent to Beijing Microread Genetics Co., Ltd at the time it was sent. This data and analysis are for research use only.

Table: STR profiles of K-562 cell line

Cell line K-562（Fig. XB4628）			
Marker	Allele 1	Allele 2	Allele 3
D19S433	14	14.2	
D5S818	11	12	
D21S11	29	30	31
D18S51	15	16	
D6S1043	11	15	
AMEL	X	X	
D3S1358	16	16	
D13S317	8	8	
D7S820	9	11	
D16S539	11	12	
CSF1PO	9	10	
Penta D	9	13	
D2S441	10	14	
vWA	16	16	
D8S1179	12	12	
TPOX	8	9	
Penta E	5	14	
TH01	9.3	9.3	
D12S391	23	23	
D2S1338	17	17	
FGA	21	24	

Figure: STR profiles of K-562 cell line