

Supplementary Table 1. Detailed information on the primer sequences

Primers for real time PCR	
UCA1-F	AAGAGATCCACCTGCGACCT
UCA1-R	CCTCCACCGTAAGAGTTACC
GAPDH-F	CATGGCCTCCGTGTTCTA
GAPDH-R	TGTCATCATACTTGGCAGGTTT
U6-F	TGCTCGCTTCGGCAGCACAT
U6-R	CTTGCAGGGGCCATGCTA
MT RNR1-F	CCTCCCCAATAAAAGCTAAAA
MT RNR1-R	GCTATTGTGTGTTCAGATAT
β-actin-F	AGTGTGACGTGGACATCCGCAAAG
β-actin-R	ATCCACATCTGCTGGAAGGTGGAC
HGF-F	TAGGCACTGACTCCGAACA
HGF-R	AGGAGATGCAGGAGGACAT
c-MET-F	AGTGAGAAGGCTAAAGGAAACG
c-MET-R	TTTGGACCGTCAAGAAGTAAAT
Primers for UCA1 cloning	
UCA1-pLVX-F	CGGAATTCTGACATTCTTCTGGACAATGAGT
UCA1-pLVX-R	CGGGATCCCTGACTCTTTAGGAAGATTCT
Primers for construction luciferase reporter vectors	
UCA1-pmirGLO-F	GCTCTAGATGACATTCTTCTGGACAATGAGT
UCA1-pmirGLO-R	TTTCCTTTGCGGCCGCTGACTCTTTAGGAAGATTCT
HGF-pmirGLO-F	GCTCTAGAACCTGAATGCCATGTGGGCCAT
HGF-pmirGLO-R	TTTCCTTTGCGGCCGCTGATCATAGAAAAGTTATTATTTAAAAG
c-MET-pmirGLO-F	GCTCTAGATGCTAGTACTATGTCAAAGCAAC
c-MET-pmirGLO-R	TTTCCTTTGCGGCCGCTGCATCACTTACTTTAATTGCAT

UCA1-pmirGLO-M-F	GTacaacaaGTTAGAGGGCTGGGACATTCACT
UCA1-pmirGLO-M-R	GCCCTCTAACttgttgtACATACTTGTGTTGCCTGGATGC
HGF-pmirGLO-M-F	CCTcaacaaATTAACCAAATATTTAAAAATATTCCTC
HGF-pmirGLO-M-R	GGTTAAATtgtttgAGGTAAGATATCTTAGTATAAAACTGGACAG
c-MET-pmirGLO-M-F	CCTTTAAtacaacaaTGTTTTGAGACAGGATCTCACTCT
c-MET-pmirGLO-M-R	ttgttgtaTTAAAAGGGAATGTTACCTAATGGG

Primers used for Sanger sequencing of KRAS, NRAS and BRAF

KRAS-exon2-F (Codon G12, G13)	TCAAAGAACGGCCTGCACC
KRAS-exon2-R (Codon G12, G13)	AGGCCTGCTGAAATGACTG
KRAS-exon3-F (Codon Q61)	ATTATTTATGGCAAATACACAAAG
KRAS-exon3-R (Codon Q61)	TCTCCCTCTCAGGATT
KRAS-exon4-F (Codon A146)	GAGAGAAAAACTGATATATTAAATGAC
KRAS-exon4-R (Codon A146)	TTCTAGAACAGTAGACACAAAAC
KRAS-exon4-F (Codon K117)	CTGAGCCTTTGTGTCTACTG
KRAS-exon4-R (Codon K117)	TTTATGACAAAAGTTGTGGACAGG
NRAS-exon2-F (Codon G12, G13)	CCTCTATGGTGGGATCATATT
NRAS-exon2-R (Codon G12, G13)	CTGATTACTGGTTCCAACAG
NRAS-exon3-F (Codon Q61)	CCTCGCCTGCCTCATGTA
NRAS-exon3-R (Codon Q61)	TTGAACCTCCCTCCCTCCCT
NRAS-exon4-F (Codon A146)	AATATGAATATGGATCACATCTA
NRAS-exon4-R (Codon A146)	ATGGTGCTAGTGGAAACAAGTGTG
NRAS-exon4-F (Codon K117)	TAACTCTGGCCAGTCGTGG
NRAS-exon4-R (Codon K117)	AGGGAGCAGATTAAGCGAGTA
BRAF-exon11-F (Codon G465, G468, Y472)	AAAAGTTGTTAACATATCCTATT
BRAF-exon11-R (Codon G465, G468, Y472)	GGGACTCGAGTGATGA
BRAF-exon15-F	GTAACTCAGCAGCATCTCAGG

BRAF-exon15-R

GCTTGCTCTGATAGGAAAATGAG

Supplementary Table 2. Clinic-pathological characteristics of metastatic CRC patients with paired specimen pre- and post-cetuximab treatment

No.	Gender	Age	Primary site	Metastatic sites	Differentiation ¹	Cetuximab regimen ²	Best response to cetuximab ³	Site of specimen (pre)	Site of specimen (post)
1	M	55	rectosigmoid	liver	G2	FOLFOX4+cetuximab	PR	rectum	rectum
2	F	36	left colon	liver, lung, peritoneal cavity	G1-G2	FOLFOX4+cetuximab	PR	sigmoid	liver lesion
3	M	67	left colon	liver, lung	G2	FOLFOX4+cetuximab	PR	sigmoid	sigmoid
4	M	59	left colon	left ovary and adnexa, lung	G1	FOLFIRI+cetuximab	SD	sigmoid	left adnexal mass
5	M	73	rectum	liver	G2	FOLFOX4+cetuximab	PR	rectum	liver lesion
6	M	80	transverse colon	liver, bone	G3	Cetuximab	SD	transverse colon	transverse colon
7	F	52	left colon	liver	G2-G3	FOLFIRI+cetuximab	SD	left colon	liver lesion
8	F	45	left colon	liver	G1	FOLFOX4+cetuximab	PR	sigmoid	liver lesion
9	M	42	right colon	liver, lung, peritoneal cavity	G2	FOLFIRI+cetuximab	SD	hepatic flexure of colon	abdominal wall mass
10	F	58	left colon	liver, lung, peritoneal cavity	G2	mFOLFOX6+cetuximab	SD	sigmoid	omental mass

1. G1, well-differentiated, G2, moderately differentiated, G3, poorly differentiated.

2. Cetuximab 400 mg/m² initial dose followed by 250 mg/m² weekly thereafter with cetuximab dose intensity>90% were given to all subjects.

Chemotherapy regimens: FOLFOX4 or mFOLFOX6, modified FOLFOX6 (5-fluorouracil, leucovorin, and oxaliplatin).

3. PR, partial response; SD, stable disease.

Supplementary Table 3. The antibodies used in the present study

Name	Company	Code
p-MET	Santa Cruz	sc-101736
MET	Santa Cruz	sc-514148
p-p85	CST	4228
p85	CST	4292
p-AKT (Ser ⁴⁷³)	CST	4060
AKT	CST	4691
p-p44/42 MAPK (Thr ²⁰² , Tyr ²⁰⁴)	CST	4370
p44/42 MAPK	CST	4695
β-actin	Santa Cruz	sc-47778
TR Monoclonal Antibody	Proteintech	67728-1-Ig
Goat Anti-Rabbit IgG-FITC	Proteintech	SA00003-2