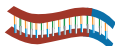


Chimera RNA interference (chimera RNAi)

A New Powerful Tool for Mammalian Gene Silencing. 

--- *Nucleic Acids Research*, 2008, 1-16

RNAi is a process by which small interfering RNA DNA chimera triggers the destruction of mRNA. The discovery work, design, and application of chimera RNAi have been pioneered by Professor Kaoru Saigo and Dr. Kumiko Ui-Tei at the University of Tokyo.

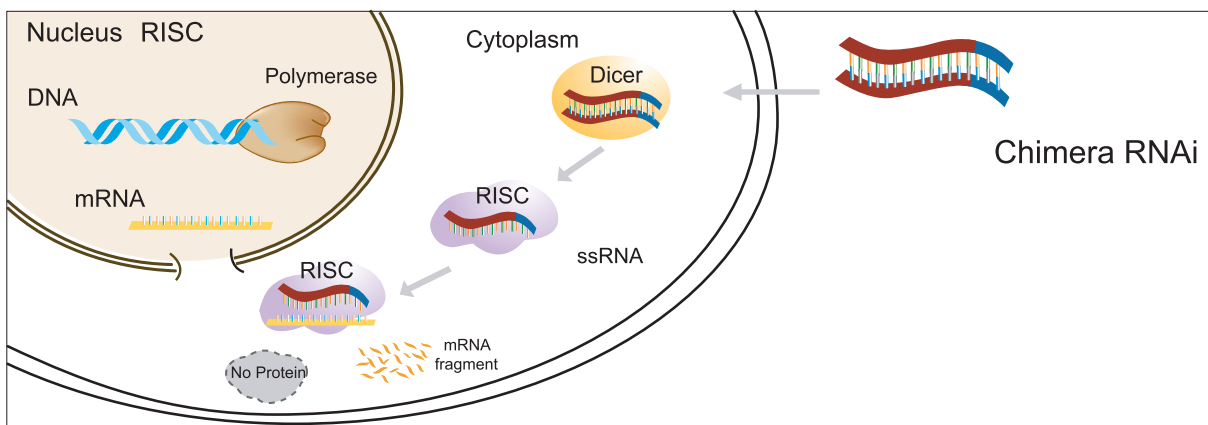
Advantages over conventional siRNAs:

Reliability: knock-down for over 10,000 human genes.

Specificity: obviate off-target effects including microRNA-based influence.

Efficacy: effective at low concentrations (0.5nM to 5nM).

Stability: streamline in vitro and in vivo assays while minimizing interferon induction.



14883 Chimera RNAi are categorized into functional groups

Angiogenesis (40)	Apoptosis (479)	Nucleic Acid Binding (2545)
Binding Others (126)	Cell Ad/Junc/Cytoskeleton (535)	Cell Cycle (704)
Cytokine (56)	Kinase (617)	Phosphatase (139)
Transferase (2)	Enzyme Others (37)	Receptor (1275)
Ion Channel (520)	Transporter (965)	Membrane Others (19)
Metabolism (333)	Neurobiology (151)	Plasma & Serum Proteome (860)
Signal Transduction (623)	Stem Cell (239)	Transcription Regulator (957)
Angiogenesis (40)	Others (3205)	

Reference:

1. Ui-Tei K, Naito Y et al. Functional dissection of siRNA sequence by systematic DNA substitution: modified siRNA with a DNA seed arm is a powerful tool for mammalian gene silencing with significantly reduced off-target effect. *Nucleic Acids Res.* 2008, Feb 11 [Epub ahead of print].
2. Naito Y, Morishita S et al. dsCheck: highly sensitive off-target search software for double-stranded RNA-mediated RNA interference. *Nucleic Acids Res.* 2005 Jul 1;33(Web Server issue):W589-91.
3. Ui-Tei K, Saigo K et al. Guidelines for the selection of highly effective siRNA sequences for mammalian and chick RNA interference. *Nucleic Acids Res.* 2004 Feb 9;32(3):936-48. Print 2004.
4. Naito Y, Saigo K et al. siDirect: highly effective, target-specific siRNA design software for mammalian RNA interference. *Nucleic Acids Res.* 2004 Jul 1;32(Web Server issue):W124-9.

Breast Cancer

Catalog No.	Gene Name	Catalog No.	Gene Name	Catalog No.	Gene Name	Catalog No.	Gene Name	Catalog No.	Gene Name
H00000031-R01	ACACA	H00001755-R04	DMBT1	H00057509-R06	MTUS1	H00005892-R06	RAD51L3	H00008794-R02	TNFRSF10C
H00000196-R01	AHR	H00009988-R01	DMTF1	H00004610-R01	MYCL1	H00005893-R01	RAD52	H00009760-R01	TOX
H00011214-R10	AKAP13	H00079813-R01	EHMT1	H00004926-R01	NUMA1	H00011186-R01	RASSF1	H00007158-R01	TP53BP1
H00000580-R01	BARD1	H00010919-R01	EHMT2	H00005290-R02	PIK3CA	H00006271-R01	S100A1	H00007272-R02	TTK
H00000672-R01	BRCA1	H00002033-R01	EP300	H00005424-R01	POLD1	H00006494-R01	SIPA1	H00203068-R01	TUBB
H00000675-R01	BRCA2	H00051053-R01	GMNN	H00005447-R01	POR	H00051151-R01	SLC45A2	H00007295-R01	TXN
H00083990-R01	BRIP1	H00002886-R01	GRB7	H00005449-R01	POU1F1	H00006615-R01	SNAI1	H00025828-R01	TXN2
H00000699-R02	BUB1	H00003981-R01	LIG4	H00084152-R01	PPP1R1B	H00006750-R01	SST	H00007296-R01	TXNRD1
H00000701-R02	BUB1B	H00004085-R01	MAD2L1	H00005519-R01	PPP2R1B	H00006751-R02	SSTR1	H00010587-R01	TXNRD2
H00000843-R01	CASP10	H00004214-R02	MAP3K1	H00007799-R01	PRDM2	H00006753-R02	SSTR3	H00007386-R01	UQCRCFS1
H00011200-R07	CHEK2	H00008932-R01	MBD2	H00005591-R03	PRKDC	H00006754-R02	SSTR4	H00007516-R02	XRCC2
H00009635-R01	CLCA2	H00004292-R01	MLH1	H00009232-R01	PTTG1	H00010948-R01	STARD3	H00002547-R02	XRCC6
H00010664-R01	CTCF	H00118856-R01	MMP21	H00010111-R03	RAD50	H00006790-R07	STK6	H00059348-R01	ZNF350
H00001543-R01	CYP1A1	H00057504-R01	MTA3	H00005889-R04	RAD51C	H00006783-R01	SULT1E1		

Cervical Cancer

H00000332-R01	BIRC5	H00001026-R01	CDKN1A	H00003809-R03	KIR2DS4	H00003812-R02	KIR3DL2	H00007161-R01	TP73
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Colon Cancer

H00000092-R04	ACVR2A	H00001111-R02	CHEK1	H00002952-R01	GSTT1	H00002956-R01	MSH6	H00005338-R01	PLD2
H00000239-R01	ALOX12	H00001499-R01	CTNNB1	H00003265-R01	HRAS	H00004595-R01	MUTYH	H00005395-R01	PMS2
H00000324-R01	APC	H00001557-R01	CYP2C19	H00010982-R01	MAPRE2	H00000010-R01	NAT2	H00050484-R01	RRM2B
H00008312-R01	AXIN1	H00001630-R02	DCC	H00004192-R01	MDK	H00004830-R05	NME1	H00006817-R01	SULT1A1
H00000581-R01	BAX	H00002052-R01	EPHX1	H00027030-R01	MLH3	H00001728-R01	NQO1	H00010716-R01	TBR1
H00001030-R01	CDKN2B	H00009156-R01	EXO1	H00022915-R01	MMRN1	H00004521-R01	NUDT1	H00007037-R02	TFRC
H00001044-R01	CDX1	H00002941-R01	GSTA4	H00004360-R02	MRC1	H00004953-R01	ODC1	H00007372-R01	UMPS
H00001045-R01	CDX2	H00002950-R01	GSTP1	H00004436-R01	MSH2	H00005320-R01	PLA2G2A		

Lung Cancer

H00010142-R01	AKAP9	H00001572-R01	CYP2F1	H00003978-R01	LIG1	H00005423-R01	POLB	H00006303-R01	SAT
H00008644-R01	AKR1C3	H00001643-R01	DDB2	H00004152-R01	MBD1	H00011201-R01	POLI	H00007869-R03	SEMA3B
H00000328-R01	APEX1	H00001991-R01	ELA2	H00004193-R01	MDM2	H00010848-R01	PPP1R13L	H00079723-R01	SUV39H2
H00009826-R01	ARHGEF11	H00002064-R05	ERBB2	H00004199-R01	ME1	H00005887-R01	RAD23B	H00006996-R01	TDG
H00079365-R01	BHLHB3	H00002067-R01	ERCC1	H00004255-R01	MGMT	H00011228-R01	RASSF8	H00054802-R01	TRIT1
H00084254-R04	CAMKK1	H00002072-R01	ERCC4	H00004350-R01	MPG	H00051455-R01	REV1L	H00007508-R01	XPC
H00001583-R01	CYP11A1	H00002189-R01	FANCG	H00005111-R01	PCNA	H00006240-R01	RRM1		

Ovarian Cancer

H00000894-R01	CCND2	H00001017-R03	CDK2	H00001032-R01	CDKN2D	H00004052-R05	LTBP1	H00005378-R01	PMS1
H00000898-R01	CCNE1	H00001021-R02	CDK6	H00003336-R01	HSPE1	H00005245-R01	PHB		

Prostate Cancer

H00023600-R01	AMACR	H00002048-R07	EPHB2	H00003399-R01	ID3	H00004824-R01	NKX3-1	H00007100-R02	TLR5
H00000463-R01	ATBF1	H00002146-R01	EZH2	H00003486-R01	IGFBP3	H00005230-R02	PGK1	H00010333-R02	TLR6
H00008537-R01	BCAS1	H00002160-R01	F11	H00001316-R01	KLF6	H00006041-R03	RNASEL	H00007113-R02	TMPRSS2
H00001027-R01	CDKN1B	H00003249-R03	HPN	H00000354-R01	KLK3	H00026136-R01	TES		
H00064816-R01	CYP3A43	H00003293-R01	HSD17B3	H00011178-R01	LZTS1	H00007054-R01	TH		
H00002014-R01	EMP3	H00003283-R01	HSD3B1	H00004481-R01	MSR1	H00114609-R03	TIRAP		

Stomach Cancer

H00001789-R01	DNMT3B	H00002957-R01	GTF2A1	H00000143-R01	PARP4	H00007159-R01	TP53BP2		
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Check Abnova website for more Chimera RNAi products!