

# Dharmacon™ Zoonome™ siRNA Libraries

## Product description:

Dharmacon™ Zoonome™ siRNA libraries are enzymatically prepared pooled or individual siRNAs designed to silence specific target genes. The product is delivered as double-stranded RNA oligonucleotides dried down in microtiter plates.

## Handling and storage recommendations:

Zoonome siRNA reagents (z-siRNA) are shipped as dry pellets at ambient temperature, and should be stored at -20 °C upon arrival in a manual defrost or non-cycling freezer. Under these conditions, the z-siRNAs are stable for at least one year. If necessary, z-siRNAs can be stored as dry pellets (unopened) at 4 °C for several weeks.

## Resuspension recommendations:

1. The average quantity per well per plate is approximately 0.25 nmoles. When ready to resuspend, briefly centrifuge plates to ensure that the z-siRNA is collected at the bottom of the well.
2. Wipe adhesive foil cover with 70% ethanol or other RNase-decontamination solution such as Fisherbrand™ RNase Displace™ Decontaminant (Cat #04-355-136; 04-355-138; 04-355-137).
3. Carefully peel back the foil seal to gain access to wells. Use caution and avoid shredding the seal.
4. Resuspend z-siRNAs to a convenient stock concentration using 1x resuspension buffer (see Note below) prepared from 5x siRNA Buffer (Cat # B-002000-UB-100) or RNase-free water (Cat #B-003000-WB-100). Concentrated stocks of 5-10 μM are recommended. Add 50 μL for a 5 μM stock concentration or 25 μL for a 10 μM stock concentration. Stock solutions of < 5 μM may better accommodate dilution schemes for high-throughput transfections and assays conducted on robotic platforms.

**Note: Dilute 5x siRNA buffer (Cat # B-002000-UB-100) to 1x concentration (resuspension buffer) with RNase-free water (Cat #B-003000-WB-100).**

5. Pipette solution up and down 3-5 times while avoiding the introduction of bubbles.
6. Seal the plate with an appropriate adhesive or heat seal and place plate on an orbital mixer/shaker for 70-90 minutes at room temperature. This additional mixing results in more reliable resuspension.
7. Briefly centrifuge plates to collect solution to bottom of the wells.
8. z-siRNA may now be used immediately, stored at -20 °C in a manual defrost or non-cycling freezer, or aliquoted into daughter plates.
  - a. Polypropylene accommodates storage at -80 °C and is often used for daughter plate creation.
  - b. Polystyrene plates are suitable for -20 °C storage, but become brittle at -80 °C and may be subject to breakage.
9. Seal plates with an appropriate adhesive or heat seal for storage.
10. Limit freeze-thawing of each plate.
11. It is recommended to use a 25-50 nM final concentration when transfecting Zoonome siRNA libraries to accommodate the variable quantity per well and ensure sufficient final z-siRNA concentration in each experiment.



## Plate Types and Layout:

### 384-well z-siRNA libraries

- Thermo Scientific™ ABgene™ 384-Well Storage Plate (Polypropylene, Pyramidal bottom) (Cat #AB-0781)
- Thermo Scientific™ Easy Pierce™ Heat Seal (Cat #AB-3738)
- 384-well libraries are fulfilled with the following plate layout: 320 wells per plate, columns 1, 2 and 23, 24 are left empty  
"1" refers to z-siRNA reagent to gene 1, "2" refers to z-siRNA reagent to gene 2, etc.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
A	Empty	Empty	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Empty	Empty
B	Empty	Empty	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	Empty	Empty
C	Empty	Empty	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	Empty	Empty
D	Empty	Empty	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	Empty	Empty
E	Empty	Empty	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	Empty	Empty
F	Empty	Empty	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	Empty	Empty
G	Empty	Empty	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	Empty	Empty
H	Empty	Empty	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	Empty	Empty
I	Empty	Empty	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	Empty	Empty
J	Empty	Empty	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	Empty	Empty
K	Empty	Empty	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	Empty	Empty
L	Empty	Empty	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	Empty	Empty
M	Empty	Empty	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	Empty	Empty
N	Empty	Empty	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	Empty	Empty
O	Empty	Empty	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	Empty	Empty
P	Empty	Empty	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	Empty	Empty

### 96-well z-siRNA libraries (available on request)

- NUNC Polystyrene 96 well V- bottom plates (Cat #249952)
- Thermo Scientific™ Easy Pierce™ Heat Seal (Cat #AB-3738)
- 96-well libraries are fulfilled with the following plate layout: 80 wells per plate, columns 1 and 12 are left empty  
"1" refers to z-siRNA reagent to gene 1, "2" refers to z-siRNA reagent to gene 2, etc.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Empty	1	2	3	4	5	6	7	8	9	10	Empty
B	Empty	11	12	13	14	15	16	17	18	19	20	Empty
C	Empty	21	22	23	24	25	26	27	28	29	30	Empty
D	Empty	31	32	33	34	35	36	37	38	39	40	Empty
E	Empty	41	42	43	44	45	46	47	48	49	50	Empty
F	Empty	51	52	53	54	55	56	57	58	59	60	Empty
G	Empty	61	62	63	64	65	66	67	68	69	70	Empty
H	Empty	71	72	73	74	75	76	77	78	79	80	Empty

## Information provided with all library orders:

Plate Maps are provided in Excel files on a USB drive and include Sample Location (Plate and Well), Gene ID, RefSeq or Ensembl Accession Number, and Sequence Information.

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 Technical Support: [ts.dharmacon@ge.com](mailto:ts.dharmacon@ge.com) or  
 1.800.235.9880; 303.604.9499 if you have any questions.