

FusionPlex® Lung

Part # SK0133

Description

The FusionPlex Lung panel is an optimized, balanced pool of gene-specific primers (GSPs) that is used in conjunction with FusionPlex Reagents and Molecular Barcode (MBC) Adapters to produce targeted NGS libraries.

FusionPlex Lung contains **163** GSPs targeting **14** genes commonly mutated in lung cancer.

Contents

Description	Part Number	Storage Conditions
Archer® FusionPlex® Lung GSP1 - 8 reactions	SA0166081	-20°C ± 10°C
Archer® FusionPlex® Lung GSP2 - 8 reactions	SA0166082	
10X VCP Primer Mix	SA0126	

Recommended Reads and Multiplexing

The recommended sequencing depth for FusionPlex Lung libraries is **500,000** reads per sample.

Assay Targets

Gene	Accession	Exon	Assay Type	Description
ALK	NM_004304	22, 23, 25	Mutation	T1151-C1156, F1174, L1196-S1206, G1269
ALK	NM_004304	2, 4, 6, 10, 16, 17, 18, 19, 20, 21, 22, 23, 26	Fusion	5'
BRAF	NM_004333	15	Mutation	V600
BRAF	NM_004333	2, 7, 8, 9, 10, 11, 12, 15, 16	Fusion	5'
BRAF	NM_004333	1, 3, 7, 8, 10, 13	Fusion	3'
EGFR	NM_005228	18, 19, 20, 21	Mutation	E709-G719, E746-L760, V774-G796, L858-L861
EGFR	NM_005228	7, 8, 9, 16, 19, 20,	Fusion	5'
EGFR	NM_005228	8	Exon 2-7 Skipping (EGFRvIII)	5'
EGFR	NM_005228	1, 24, 25	Fusion	3'
EGFR	NM_005228	1	Exon 2-7 Skipping (EGFRvIII)	3'

FGFR1	NM_015850	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17	Fusion	5'
FGFR1	NM_015850	12, 17	Fusion	3'
FGFR2	NM_000141	2, 5, 7, 8, 9, 10	Fusion	5'
FGFR2	NM_000141	16, 17	Fusion	3'
FGFR3	NM_000142	3, 5, 8, 9, 10	Fusion	5'
FGFR3	NM_000142	16, 17, 18	Fusion	3'
KRAS	NM_004985	2, 3	Mutation	G12-G13, Q61
MET	NM_000245	2, 4, 5, 6, 13, 14, 15, 16, 17, 21	Fusion	5'
MET	NM_000245	15	Exon 14 Skipping	5'
MET	NM_000245	2, 13	Fusion	3'
MET	NM_000245	13	Exon 14 Skipping	3'
NRG1	NM_013957	1, 8	Fusion	5'
NRG1	NM_004495	1, 2, 3, 4, 6	Fusion	5'
NRG1	NM_013962	1	Fusion	3'
NTRK1	NM_002529	2, 4, 6, 8, 10, 11, 12, 13	Fusion	5'
NTRK2	NM_006180	5, 7, 9, 11, 12, 13, 14, 15, 16, 17	Fusion	5'
NTRK3	NM_002530	4, 7, 10, 12, 13, 14, 15, 16	Fusion	5'
NTRK3	NM_001007156	15	Fusion	5'
NTRK3	NM_002530	13, 14, 15	Fusion	3'
RET	NM_020630	15,16	Mutation	A883, M918
RET	NM_020630	2, 4, 6, 8, 9, 10, 11, 12, 13, 14	Fusion	5'
ROS1	NM_002944	38	Mutation	G2032
ROS1	NM_002944	2, 4, 7, 31, 32, 33, 34, 35, 36, 37	Fusion	5'

Archer Analysis Settings

Sequencing data should be processed using [Archer Analysis](#) (v5.0 or greater). The FusionPlex Lung panel requires selection of the **RNA Fusion** pipeline, found under the RNA Analysis Type in Archer Analysis. The **RNA SNP/InDel** pipeline may optionally be chosen as well (see the software user manual for further details on setting up analyses).

Limitations of Use

For Research Use Only. Not for use in diagnostic procedures. Not intended to be used for treatment of human or animal disease.

Safety data sheets pertaining to this product are available upon request.

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