

# Seraseq<sup>®</sup> FFPE NTRK Fusion RNA Reference Material

COMPREHENSIVE REFERENCE STANDARD FOR NTRK GENE FUSION CLINICAL ASSAYS

## HIGHLIGHTS

HIGHLY MULTIPLEXED REFERENCE MATERIAL CONTAINING CLINICALLY SIGNIFICANT RNA FUSIONS NON-INFECTIOUS AND REPLICATION DEFICIENT; ENSURES SAFETY DURING ASSAY DEVELOPMENT AND END-USER UTILITY.

QUANTIFIED TRANSCRIPT LEVELS ALLOW EASY LIMIT OF DETECTION STUDIES TO ESTABLISH ASSAY SENSITIVITY

HIGH-QUALITY MANUFACTURED REFERENCE MATERIAL PROVIDES CONSISTENT GROUND TRUTH

## INTRODUCTION

**Neurotrophic tyrosine receptor kinases (NTRK) can become abnormally fused to other genes, resulting in growth signals that can lead to cancer. Anti-tumor drugs that target NTRK fusions have been shown to be largely effective across many tumor types. Anti-tumor therapeutic drugs that specifically target NTRK fusions in locally advanced or metastatic solid tumors are in various stages of development and clinical trials for patient treatment.**

Patient samples bearing NTRK 1/2/3 fusions can be very difficult to source affordably, and a sustainable supply of multiplexed NTRK fusion-positive material is critical to ensuring thorough assay validation and accurate stratification of patients for relevant therapies.

## FUSIONS INCLUDED IN THE SERASEQ FFPE NTRK FUSION RNA REFERENCE MATERIAL

SeraCare's AccuPlex recombinant material serves as a true molecular process control for your diagnostic assays. Compatible with multiplexed RT-PCR and NGS-based assays, AccuPlex custom recombinant materials are constructed with a replication-deficient mammalian virus, producing a safe, non-infectious material (Figure 1). With a protein coat and lipid bilayer, these mammalian virus-based reference materials resemble the complexity of virus targets found in patient samples.

TPM3-NTRK1	LMNA-NTRK1	IRF2BP2-NTRK1	SQSTM1-NTRK1	TFG-NTRK1
AFAP1-NTRK2	NACC2-NTRK2	QKI-NTRK2	TRIM24-NTRK2	PAN3-NTRK2
ETV6-NTRK3	ETV6-NTRK3	ETV6-NTRK3	ETV6-NTRK3	BTBD1-NTRK3

## FEATURES AND BENEFITS

- 15 representative fusions across all three NTRK genes in a single reference sample gives you more data per run
- Full-process FFPE format to evaluate the entire workflow
- Fusions precisely quantitated with digital PCR
- Well-characterized GM24385 human genomic RNA as background wild-type material
- Manufactured in GMP-compliant and ISO 13485-certified facilities to ensure manufacturing quality and lot-to-lot consistency

## ABOUT SERACARE

TRUSTED SUPPLIER TO THE DIAGNOSTIC TESTING INDUSTRY FOR OVER 30 YEARS.

HIGH-QUALITY CONTROL PRODUCTS, RAW BIOLOGICAL MATERIALS, AND IMMUNOASSAY REAGENTS.

INNOVATIVE TOOLS AND TECHNOLOGIES TO PROVIDE ASSURANCE IN DIAGNOSTIC ASSAY PERFORMANCE AND TEST RESULTS.

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## FUSIONS AND GENOMIC COORDINATES

Fusion RNA	5' Partner	3' Partner	HGVS Name
TPM3-NTRK1	TPM3 exon 7	NTRK1 exon 9	TPM3{ENST00000368533}:r.1_717_NTRK1{ENST00000392302}:r.1262_2609
LMNA-NTRK1	LMNA exon 11	NTRK1 exon 11	LMNA {ENST00000368299}:r.1:2015_NTRK1{ENST00000392302}:r.1318_2609
IRF2BP2-NTRK1	IRF2BP2 exon 1	NTRK1 exon 9	IRF2BP2{ENST00000366609}:r.1_1079_NTRK1{ENST00000392302}:r.1262_2609
SQSTM1-NTRK1	SQSTM1 exon 5	NTRK1 exon 9	SQSTM1{ENST00000389805}:r.1_932_NTRK1{ENST00000392302}:r.1262_2609
TFG-NTRK1	TFG exon 5	NTRK1 exon 9	TFG{ENST00000240851}:r.1_920_NTRK1{ENST00000392302}:r.1262_2609
AFAP1-NTRK2	AFAP1 exon 14	NTRK2 exon 10*	AFAP1{ENST00000420658.1}:r.1_2170_NTRK2{ENST00000376214}:r.2098_5608
NACC2-NTRK2	NACC2 exon 4	NTRK2 exon 11*	NACC2{ENST00000371753}:r.1_1314_NTRK2{ENST00000376214}:r.2134_5608
QKI-NTRK2	QKI exon 6	NTRK2 exon 14*	QKI{ENST00000361752}:r.1_1485_NTRK2{ENST00000376214}:r.2383_5608
TRIM24-NTRK2	TRIM24 exon 12	NTRK2 exon 13*	TRIM24{ENST00000343526}:r.1_2229_NTRK2{ENST00000376214}:r.2335_5608
PAN3-NTRK2	PAN3 exon 1	NTRK2 exon 15*	PAN3{ENST00000380958}:r.1_582_NTRK2{ENST00000376214}:r.2572_5608
ETV6-NTRK3	ETV6 exon 5	NTRK3 exon 14	ETV6{ENST00000396373}:r.1_1283_NTRK3{ENST00000394480}:r.1719_19984
ETV6-NTRK3	ETV6 exon 5	NTRK3 exon 15	ETV6{ENST00000396373}:r.1_1283_NTRK3{ENST00000394480}:r.1908_19984
ETV6-NTRK3	ETV6 exon 4	NTRK3 exon 15	ETV6{ENST00000396373}:r.1_737_NTRK3{ENST00000394480}:r.1908_19984
ETV6-NTRK3	ETV6 exon 4	NTRK3 exon 14	ETV6{ENST00000396373}:r.1_737_NTRK3{ENST00000394480}:r.1719_19984
BTBD1-NTRK3	BTBD1 exon 4	NTRK3 exon 14	BTBD1{ENST00000261721}:r.1_1065_NTRK3{ENST00000394480}:r.1719_19984

\*These exon numbers correspond to Transcript: NTRK2-201 ENST00000277120.7

SeraCare's portfolio of fusion RNA reference materials saves you time and money with the most comprehensive gene content of any commercially available reference material. Whether developing, validating, or monitoring a clinical NGS fusion RNA assay, SeraCare is your sustainable source of orthogonally validated standards in the formats you need. For more information, visit [www.seracare.com](http://www.seracare.com).

## ORDERING INFORMATION

Product	Format	Item Number	Concentration	Volume	Total Mass
SeraSeq FFPE NTRK Fusion RNA Reference Material	Extraction Required - FFPE	0710-1031	1 FFPE curl / vial	10 um	> 400ng



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