Get more from your sarcoma analysis
Detect known and novel fusion partners for fast insights with NGS

Sarcomas are rare but complex
Sarcomas are cancers found in connective tissues such as bone and soft tissues. While rare—with more than 15,000 new diagnoses each year in the US—27% are found in children and young adults under age 30.\(^1\,^2\)

~1/3 of sarcomas are caused by chromosomal translocations that lead to gene fusions.\(^3\,^4\)

Sarcomas include more than 50 subtypes based on the cell of origin.\(^6\)

Gene fusion partners matter
Some genes, such as \textit{EWSR1}, are particularly associated with sarcomas and have multiple fusion partners. These varied fusion partnerships result in different sarcoma subtypes.\(^5\)

Accurate subtype identification is essential for implementing insights
Detecting sarcoma subtypes is more complicated than identifying the cell of origin, but conventional molecular analysis methods can have limitations.

Fluorescence \textit{in situ} hybridization (FISH)
- Usually interrogates only one pair of genes
- Translocations of one gene can occur with multiple fusion partners, resulting in incorrect sarcoma subtype identification

Reverse transcription polymerase chain reaction (RT-PCR)
- Requires knowledge of both partners and anticipated break points

\textbf{TruSight™ RNA Fusion Panel: Comprehensive coverage in a single assay}
Next-generation sequencing (NGS) covers hundreds of fusion-associated genes—and can detect novel fusions—so you can identify chromosomal abnormalities in the first try.

For Research Use Only. Not for use in diagnostic procedures.
The TruSight RNA Fusion Panel
Known and novel fusions. Fast and accurate insights.

TruSight RNA Fusion Panel covers a broad range of fusion-associated genes

>500 Fusion-associated genes
142 Fusions previously found in sarcomas
Novel Fusion Detection without prior knowledge of specific translocations or chromosomal breakpoints

Identify fusions associated with common sarcomas

- Ewing’s Sarcoma
- Alveolar Rhabdomyosarcoma
- Synovial Sarcoma
- Myxoid Liposarcoma
- Other subtypes

Round cell tumors

Spindle cell tumors

The TruSight RNA Fusion Panel provides a reproducible and economical solution for identifying gene fusions in sarcomas.

Learn More
For more information about the TruSight RNA Fusion Panel, visit illumina.com/RNAFusion.

References