## Unlock 3D Genomics With The Dovetail® TopoLink™ Assay

The next generation Hi-C assay

Revolutionize your understanding of gene regulation and biological processes through the power of 3-dimensional DNA organization.





## **How TopoLink Works**

### Capture genomic structure in NGS data

Through a few simple steps, generate a NGS library that can be processed through standard genomic analysis tools, with no specialized training or equipment required.

#### Sample

#### **Process**

Sequence









Cells, Tissue, Blood

**Fragment and Ligate** 

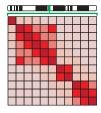
**Data Generation** 

# **What TopoLink Provides**

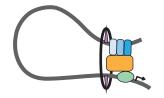
## **Identify expression mechanisms**

Generate quantitative links between drivers of expression, such as transcription factors or single nucleotide variants (SNVs), to cognate gene promoters through chromatin structure.

## Chromatin Structure

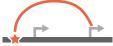


## **Transcription Factor Dynamics**



### **SNV/VUS Annotation**





## Who TopoLink is For

#### From disease drivers to therapy

Apply 3D genomics powered insights to better understand, monitor, and treat diseases. Identify and describe novel drivers across a broad range of phenotypes including: cancer, neurological disorders, autoimmune diseases, and more.

#### Genome **Function**



Gene Regulation Enhancer-Promoter Interactions **Chromatin State** 

#### **Mechanisms of Human Health and Disease**



Oncology Neurobiology **Developmental Disease** 

## **Therapeutic Advancement**



Biomarker Development Accelerated Target ID **Cohort Stratification** 

## Why Choose TopoLink

#### Unparalled access to the 3D genome

The TopoLink assay provides value across the 3D genomics workflow, delivering best-in-class data and meaningful biological insights. The TopoLink chemistry prioritizes data quality to ensure accuracy and reproducibility while offering significant reduction in overall experiment cost.

#### **Unbaised Data**



Capture more information across more of the genome

### **Improved Accuracy**



accurate position of feature calls

#### Reduced Cost



Ensures the most Significant savings Spend more time across entire experiment design

## Time Saving



on the biology, not at the bench





