

Arima Promoter Capture Panel

A POWERFUL TOOL FOR NEW BIOLOGICAL INSIGHTS

The Arima Promoter Capture panel is built on the Arima Capture-HiC+ platform technology, which enables researchers to characterize the regulatory landscape of their samples. For researchers who are looking to gain deeper insights into the genetic and epigenetic mechanisms that drive regulation, the Arima Promoter Capture panel offers a **comprehensive design** spanning the entire human and mouse genomes and **consistent performance** that reliably delivers high quality data. Furthermore, the panel leverages an **open bioinformatics platform** that is optimized to deliver conformation profiles across all promoters with minimal setup.

Gene Category	Human	Mouse
Protein Coding	18,741	21,088
Antisense	84	207
lncRNA	170	544
miRNA	1,878	1,015
snoRNA	938	1,494
snRNA	1,898	1,383
Other	2	0
Total	23,711	25,731

COMPREHENSIVE DESIGN AND CONSISTENT PERFORMANCE FOR HIGH QUALITY DATA

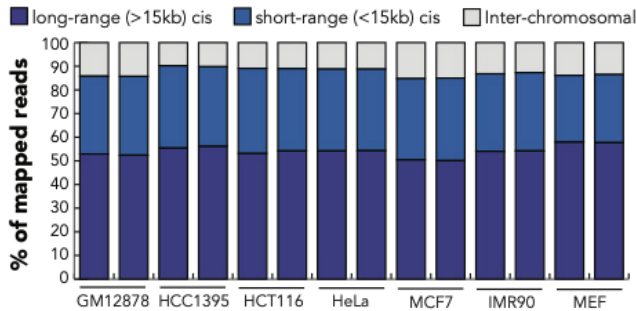


Figure 1. High Cis (signal):Trans (noise) ratio leads to high quality interaction data. The Arima Promoter Capture module was used against 7 sample cell lines (GM12878, HCC1395, HCT116, HeLa, MCF7, IMR90 and MEF). We demonstrate that across all sample types, cis-reads consistently represented 85-90% of all mapped reads. A high cis to trans ratio of mapped reads is a strong indicator of excellent signal:noise which will allow efficient identification of spatially conserved chromatin compartments

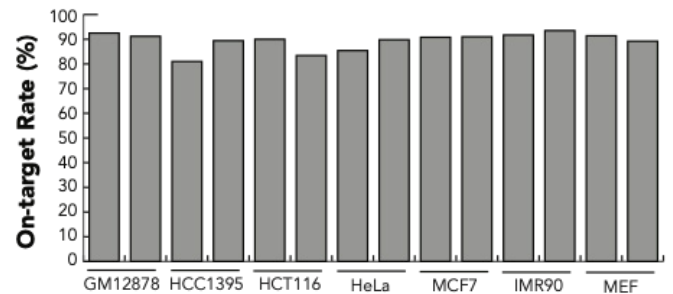


Figure 2. Very high on-target read coverage maximizes sequencing efficiency and reduces sequencing depth requirements. 7 samples were processed using the Arima Capture-HiC+ platform including the Arima Library Prep kit, the Arima HiC+ kit and the Arima Promoter Capture module.

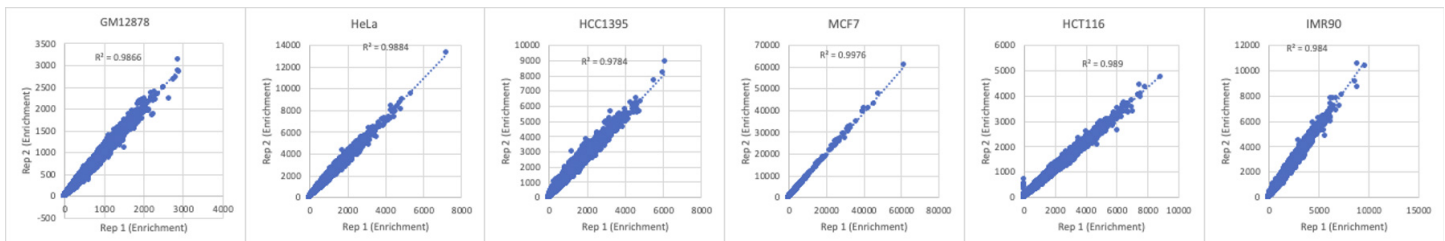
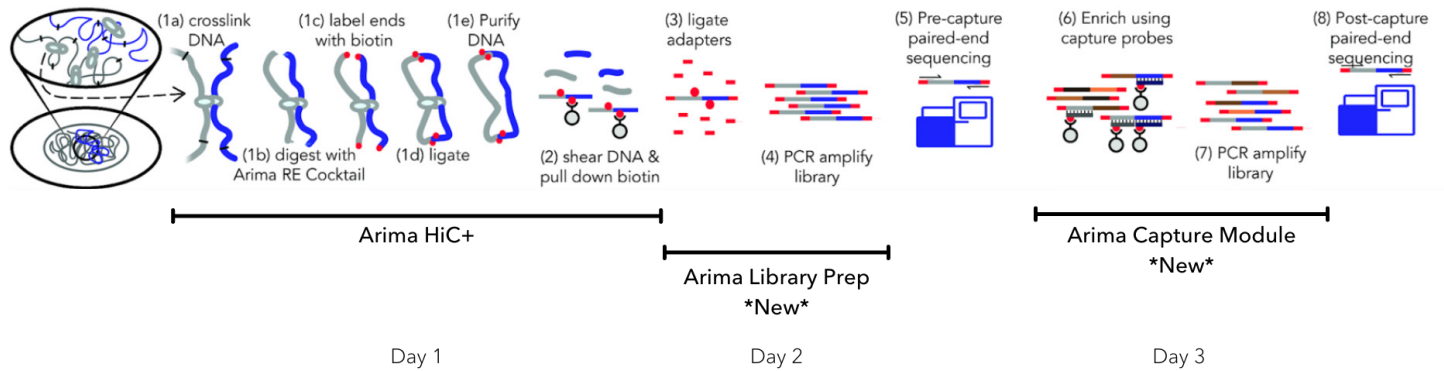


Figure 3. High correlation between technical replicates ensures accurate differential analysis. Technical replicates of 6 different cell lines demonstrate minimal run-to-run variability (0.97-0.99 Pearson correlation). Therefore differences between samples are driven by biology rather than by technical variability.

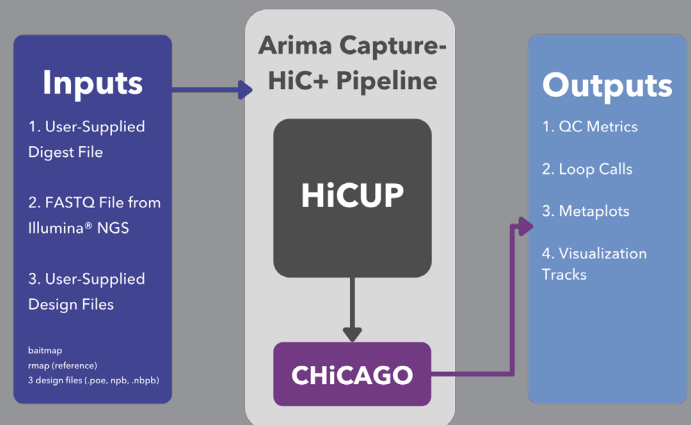
SEQUENCING READY LIBRARIES IN JUST 3 DAYS



AN OPEN AND OPTIMIZED BIOINFORMATICS PLATFORM

The Arima Capture-HiC+ pipeline is built upon the open-source HiCUP and CHiCAGO pipelines. When combined with the Arima Promoter Capture panel, users only need to supply the FASTQ sequencing file from the Illumina® sequencing run – all other files and documents are supplied by Arima to help your bioinformatics team streamline their analysis.

The outputs from users everything they need to confirm that the quality of the data meets their needs, to characterize interactions via loop calls, and to visualize their data leveraging the Wash U Epigenome Browser.



PRODUCT LIST

Arima Capture-HiC+ Kits

- 8 rxn Arima HiC+ kits x 1 (8 rxns) / 8 rxn Arima HiC+ kits x 2 (16 rxns)
- Arima Capture Module x 1
- Arima Library Prep Module x 1

Product Specifications

Sample Type*	Cell Culture, Primary Cells
Sample Input**	Standard Input: 1M cells
Reads	5kb resolution, 100M reads/sample
Compatible Sequencer	Illumina™ sequencing platforms
Bioinformatics	Arima Capture-HiC+ Pipeline
Reference Genome	Human (hg38) and Mouse (mm10)

*Additional sample types and lower input amounts are possible

SKU	Description	Size
A301010	Arima HiC+ for promoter cHiC (human)	8 rxns
A301020	Arima HiC+ for promoter cHiC (mouse)	8 rxns

Arima Capture Modules

SKU	Description	Size
A302010	Arima Promoter Capture module (human)	8 rxns
A302020	Arima Promoter Capture module (mouse)	8 rxns

Arima Library Prep Modules

SKU	Description	Size
A303010	Arima Library Prep kit	16 rxns