Evolutionary Wide Research Panels

my Baits Panels for Evolutionary wide Research	Types of Panels	Panel description	What it works for?	What challenges the panels help with?	How Daicel Arbor helps?	Research Application purpose
Ultraconserved Elements (UCEs) panels ***For those studying deep evolutionary relationships across vertebrates, invertebrates, or specific cades.***	ALL UCE panels	UCEs are highly conserved genomic regions flanked by variable sequences, used for phylogenetics. Sets of UCE loci have been identified for various taxonomic groups (vertebrates, insects, etc.).	Resolving phylogenetic relationships among animal taxa Studying speciation, adaptive radiation, and biogeography Investigating genomic conservation and evolutionary constraints Generating reference phylogenies for comparative studies Working with non-model organisms and degraded DNA samples	Low-quality or degraded DNA (museum/ancient specimens) Limited Starting materials Need for high resolution phylogenetic materials Working with non-model species lacking genomic resources Desire for cost-effective, scalable solutions for large sample sets	Targeted enrichment of conserved genomic regions across taxa Compatible with low-input and degraded DNA Custom probe design for specific clades Validated protocols and bioinformatics Scalable workflow for larger complex projects	Phylogenetic reconstruction across broad evolutionary timescales Population level studies analysis of museum and degraded samples for genealogy studies in diverse taxonomic groups Application in various organisms from vertebrates to invertebrates and clades