



MetaGene™ Canine

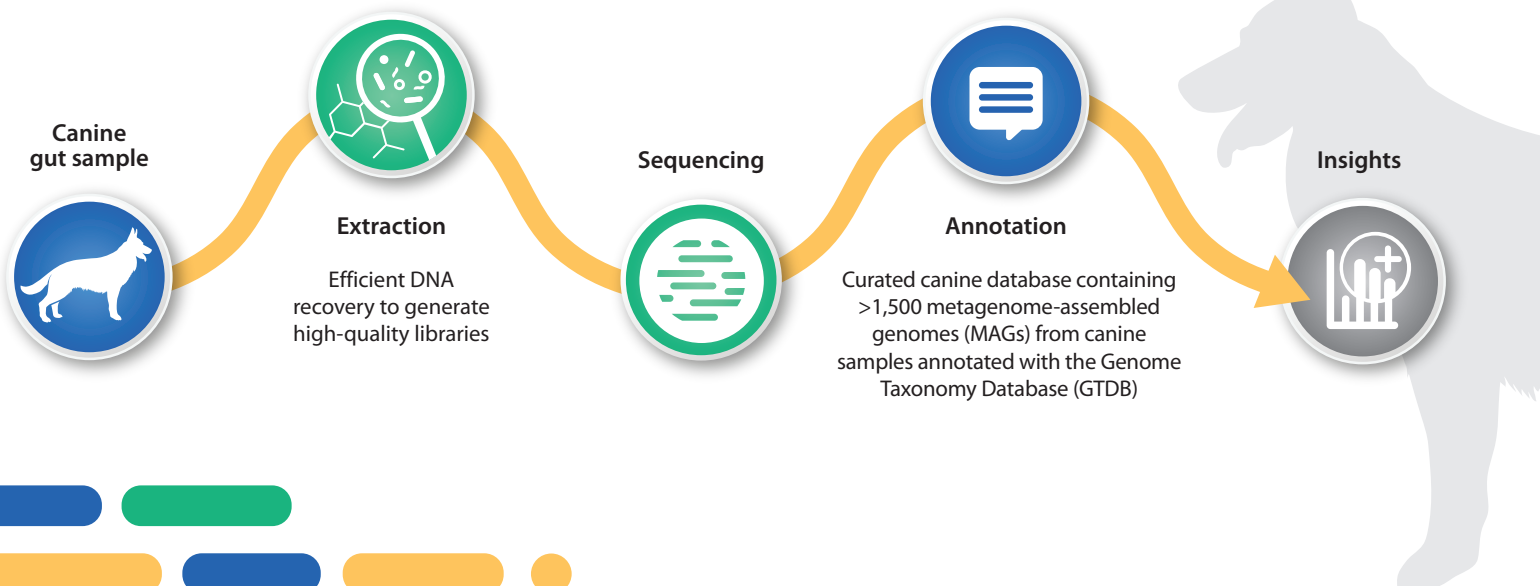
Tailored canine gut microbiome analysis

Diversigen's solution delivers:

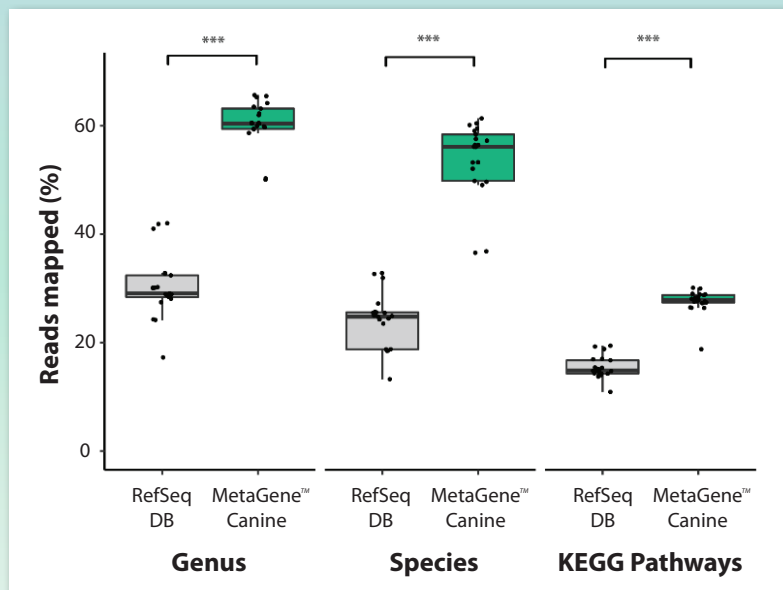
- **Insights into the canine microbiome through our curated canine reference database**
- **Comprehensive taxonomic and functional analysis**

Our understanding of gut microbiome composition and function depends on reference databases and how well they represent systems and their hosts. In the case of canines, using reference databases composed of mainly human-relevant microbes provides limited information, leaving a large proportion of canine gut microbiome sequences unannotated. This creates an incomplete picture of the canine microbiome. To address this, Diversigen developed MetaGene™ Canine, a specialized metagenomics service that utilizes a comprehensive canine reference database that substantially improves understanding of canine microbial community composition and function.

Capture more information from your canine gut samples



A better picture of the canine gut microbiome



MetaGene™ Canine identifies more canine-specific taxa and Kyoto Encyclopedia of Genes and Genome (KEGG) pathways resulting in higher taxonomic and functional resolution. This provides a significantly greater percentage of reads mapped when compared to the analysis done using a human-focused database (curated RefSeq DB) (t-test, $p < 0.001$).

Uncover more canine microbiome functions associated with health, nutrition and disease

Gut samples	KEGG Modules			
	Differentially abundant		Unique	
	MetaGene™ Canine	RefSeq DB	MetaGene™ Canine	RefSeq DB
Canine 1	163	6	2	0
Canine 2	157	2	2	0
Canine 3	207	5	3	0
Canine 4	185	31	2	0

Triplicate canine gut samples from 4 unique donors annotated using MetaGene™ Canine and a curated RefSeq database demonstrate significantly increased recovery of more reads from KEGG modules as well as unique KEGG modules using MetaGene™ Canine.

Diversigen's team of scientists is ready to help at every step.

Interested in maximizing the value of your canine microbiome project?

Contact us at info@diversigen.com or www.diversigen.com