

Certificate of Breed

OWNER'S NAME: Morgan Westerfield

DOG'S NAME: Aranea

TEST DATE: December 31st, 2019

OWNER SUPPLIED BREED: Gray Wolf

REGISTRATION ORGANIZATION: --

REGISTRATION NUMBER: --

This certifies the authenticity of Aranea's canine genetic background as determined following careful analysis of more than 200,000 genetic markers.

MATERNAL A29a **HAPLOTYPE**

54.6% Gray Wolf

20.0% German Shepherd Dog

15.2% Alaskan Malamute

10.2% Siberian Husky

Adam Boyko, Ph.D.

Purebred certification is separate from genetic ancestry. Purebred status is defined by pedigrees at registration bodies. Ancestry looks at segments of shared DNA.

Welcome to the Embark family!

Ryan Boyko CHIEF EXECUTIVE OFFICER