

Discover the missing pieces of your dog's ancestry



# BITSA™

Breed Identification



## What is BITSA?

BITSA is Australasia's first canine, DNA based, breed identification test. This innovative test detects the breed, or mixture of breeds that make up your dog. BITSA can identify breed signatures as far back as three generations and can define, provided they are present, the primary (parent), secondary (grandparent) and distant (great-grandparent) breeds in your dog's ancestry.

## How does BITSA work?

A DNA sample is obtained by using a pain-free, non-invasive cheek swab. This sample is then analysed using the latest state of the art DNA technology and a unique breed signature is generated for your dog. Your dog's unique signature is cross-referenced against our extensive breed database and the breeds in your dog are identified. Results are then reported and given to you with an accurate and understandable analysis of your dog's true breed composition.

## What is a breed signature and how are they developed?

Breed signatures are a genetic representation of a particular canine breed. Our breed signature databases were developed using registered pedigree dogs, whose reference samples were collected at dog shows across Australia. This ensures that we have the best quality canine pedigree breed signatures.

## How accurate is the test?

Our breed signatures have been generated from over 20,000 known pure breed dogs. We are confident that our breed signatures are an accurate representation of the breeds we claim to detect. Our databases and breed signatures are being continually updated with new breeds and additional reference samples so that we can continue to provide our clients with the most accurate results. Currently, BITSA proudly maintains greater than 95% accuracy for all its test results.

## How do I collect a sample?

BITSA uses the easiest and most comfortable sample collection method for your dog. The process is simple and owners can collect the sample themselves. Simply place the provided swab against the inside of the dog's cheek and swirl in a circular motion, then put the swab in the tamper proof bag and send it away. There is no need for a vet and no stress for you or your dog.

## Can BITSA tell me if my dog is purebred?

Yes. BITSA is able to determine whether both parents of a dog were of a particular breed, allowing us to verify purebred status. Note: BITSA cannot be used as a means of obtaining official papers nor can it serve as evidence of a pedigree .



## When will I receive my results and what will they explain?

Turn around time is as quick as 5 working days from the receipt of your dog's sample. A BITSA report will be mailed to you outlining:

- 🐾 The breeds found in your dog's ancestry
- 🐾 A history of how each breed was developed
- 🐾 A unique PAWS rating system summarising the traits you may observe in your dog
- 🐾 Health concerns affecting the breed or breeds found in your dog
- 🐾 Games and activities your furry friend will love to play

In addition to your BITSA report, a certificate of DNA analysis will be included, explaining the breeds found in your dog, as well as a personalised 'Doggy Passport'; a wallet sized card with a photograph of your dog and a list of your dog's breeds.

(Photographs are optional and only required if you would like to add a picture of your dog to the passport at no extra charge).

## What breeds can BITSA identify?

BITSA can currently identify 57 breeds, with additional breeds to be added and updated on a regular basis. Identifiable breeds as of January 2009 include:

Alaskan Malamute	Bulldog	Golden Retriever	Poodle (Miniature)
American Staffordshire Terrier	Cavalier King Charles Spaniel	Great Dane	Poodle (Toy)
Australian Cattle Dog	Chihuahua (Long-haired)	Greyhound	Pug
Australian Shepherd	Chihuahua (Short-haired)	Irish Setter	Rhodesian Ridgeback
Australian Stumpy Tailed Cattle Dog	Chow Chow	Italian Greyhound	Rottweiler
Basset Hound	Cocker Spaniel	Jack Russell Terrier	Scottish Terrier
Beagle	Curly Coated Retriever	Kelpie	Shiba Inu
Bichon Frise	Dalmatian	Labrador Retriever	Siberian Husky
Border Collie	Daschund	Maltese	Silky Terrier
Boston Terrier	Dobermann	Neapolitan Mastiff	Staffordshire Bull Terrier
Boxer	English Springer Spaniel	Papillon	Tibetan Spaniel
Bull Mastiff	Fox Terrier	Pointer	Tenterfield Terrier
Bull Terrier	German Shepherd	Pomeranian	Weimaraner
Bull Terrier (miniature)	German Shorthaired Pointer	Poodle (standard)	West Highland White Terrier
			Whippet

## What if my dog doesn't look like the breeds reported?

We encourage our customers to understand that our Breed Signatures are based on the purest pedigree dogs, and thus a true BITSA (dogs with mixed breed parents and grandparents) may not exhibit the exact features of the breeds detected. It is also important to realise that primary breeds are the result of at least one pure bred dog being present at the parental level in your dog's ancestry. Many canine traits are diluted with other characteristics. For example a primary German Shepherd and a secondary Golden Retriever may look very much like a German Shepherd, though with slight differences, such as a slightly longer coat, different shaped ears and a marginally warmer coloured coat.

## Why doesn't my dog have a breed for every generation?

It is important to understand that BITSA can only detect breeds that are present in a dog's ancestry. Sometimes in a dog's ancestry either one or both parents can be termed 'outbred' (dogs with mixed breed parents and grandparents); In this case a distinct breed signature is not present within a dog's DNA. As the dog is heavily mixed, this may prevent a primary or secondary breed from being determined.

