

## ARG83062 Borrelia / Lyme disease ELISA Kit

Package: 96 wells

Store at: 4°C

### Summary

Product Description	ARG83062 Borrelia / Lyme disease ELISA Kit is an enzyme immunoassay kit for the qualitative of Borrelia / Lyme disease of animals.
Tested Reactivity	Dog
Tested Application	ELISA
Target Name	Borrelia
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Detection Range	Cut-off
Sample Type	serum
Sample Volume	100 µl
Alternate Names	Borrelia, Lyme disease, Lyme borreliosis

### Application Instructions

Assay Time	~2 hour
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### Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Gene Full Name	Borrelia
Background	Borrelia is a genus of bacteria of the spirochete phylum. Several species cause Lyme disease, also called Lyme borreliosis, a zoonotic, vector-borne disease transmitted by ticks. Other species of Borrelia cause relapsing fever, and are transmitted by ticks or lice, depending on the species of bacteria. A few Borrelia species as Candidatus Borrelia mahuryensis harbor intermediate genetic features between Lyme disease and relapsing fever Borrelia. The genus is named after French biologist Amédée Borrel (1867–1936), who first documented the distinction between a species of Borrelia, B. anserina, and the other known type of spirochete at the time, Treponema pallidum. This bacterium must be viewed using dark-field microscopy, which make the cells appear white against a dark background. Borrelia species are grown in Barbour-Stoenner-Kelly medium. Of 52 known species of Borrelia, 20 are members of the Lyme disease group (with an additional 3 proposed), 29 belong to the relapsing fever group, and two are members of a genetically distinct third group typically found in reptiles. A proposal has been made to split the Lyme disease group based on genetic diversity and move them to their own genus, Borelliella, but this change is not widely accepted. This bacterium uses hard and soft ticks and lice as vectors. Testing for the presence of the bacteria in a human includes two-tiered serological testing,

including immunoassays and immunoblotting.

## Function

Lyme disease, also known as Lyme borreliosis, is a vector-borne disease caused by the *Borrelia* bacterium, which is spread by ticks in the genus *Ixodes*. The most common sign of infection is an expanding red rash, known as erythema migrans (EM), which appears at the site of the tick bite about a week afterwards. The rash is typically neither itchy nor painful. Approximately 70–80% of infected people develop a rash. Early diagnosis can be difficult. Other early symptoms may include fever, headaches and tiredness. If untreated, symptoms may include loss of the ability to move one or both sides of the face, joint pains, severe headaches with neck stiffness or heart palpitations. Months to years later repeated episodes of joint pain and swelling may occur. Occasionally shooting pains or tingling in the arms and legs may develop. Despite appropriate treatment, about 10 to 20% of those affected develop joint pains, memory problems and tiredness for at least six months.