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Antibody Datasheet

Product Name: Mouse anti Tick-borne Encephalitis Virus NS1 protein

Clone number: M838

Isotype: Mouse IgG1

Product code: MAB12292

Batch Number:

Amount: 0.1mg

Concentration: 1 mg/ml

Buffer: Phosphate Buffered Saline pH7.2

Preservative: 0.05% Sodium Azide (NaN_3)

Specificity: This antibody recognises Tick-borne Encephalitis Virus (TBEV) NS1 protein.
In ELISA assays, the antibody does not cross react with other flavivirus NS1 proteins tested including Powassan Virus (PV) Yellow Fever Virus (YFV), Japanese Encephalitis Virus (JEV), Zika virus or DENV (a mix of DENV1, DENV2, DENV3, DENV4).
In Western Blotting, the antibody predominantly recognises the dimeric form of TBEV NS1. The antibody does not cross react with other flavivirus NS1 proteins tested.

Applications: ELISA, WB

Secondary reagents: Goat anti mouse IgG:HRP (PAB21441HRP)

Antigen background: Tick-borne encephalitis virus (TBEV) belongs to the genus Flavivirus, of the family Flaviviridae. The virus is primarily transmitted through the bite of infected hard ticks, of the family *Ixodidae*. Small rodents are the primary hosts for TBEV with humans acting as accidental hosts. The virus can also be transmitted to humans through unpasteurized milk in areas where TBEV is prevalent (CDC)

TBEV is a neurotrophic virus that causes tick-born encephalitis (TBE) in humans, affecting the central nervous system (CNS). TBE is endemic in many parts of Europe, China, Mongolia and the Russian Federation and is the most common tick-born CNS infection in these. Three subtypes of TBEV have been recognised that cause tick-borne encephalitis, which are European, Far-Eastern and Siberian.

TBEV infection is asymptomatic in most cases with some individuals presenting with influenza-like symptoms. In symptomatic cases, TBEV infection typically presents as meningitis, encephalitis or meningoencephalitis. A high percentage of acute TBE cases may also develop post-encephalitic syndrome with long-lasting neuropsychiatric symptoms or neurological dysfunction (Bogovic, P).

Diagnosis of TBE infection is primarily based on clinical presentation and serological testing for TBEV specific IgM and IgG antibodies in the patient's serum and cerebrospinal fluid. There is no anti-viral treatment for TBEV. However, several effective vaccines for TBEV are currently available which are based on European and Far-Eastern strains of the virus (WHO)

References:

Centers for Disease Control and Prevention: Tick-borne encephalitis (TBE)

Bogovic P, Strle F. 2015. Tick-borne encephalitis: A review of epidemiology, clinical characteristics, and management. World J Clin Cases. May 16;3(5):430-41

World Health Organization: Tick-borne Encephalitis vaccine

Storage:

Store at +4^{0}C for up to three months, or at -20^{0}C for longer.

The Antibody is shipped at ambient temperature.
Avoid repeated freeze/thaw cycles.