

Recombinant Leishmania infantum K39 Antigen, His tagged, Biotinylated

Cat. No. K39-028L **Lot. No.** (See product label)

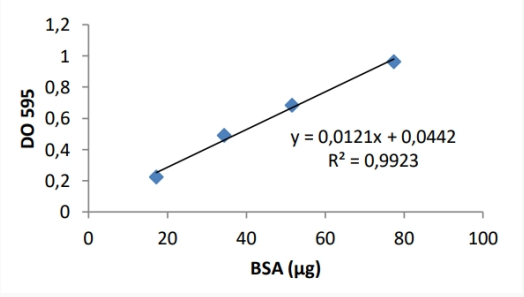
SPECIFICATION

Product Overview	The Leishmania infantum antigen kinesin K39 has been prepared as a recombinant antigen fused to a his-tag in the N-terminus and monobiotinylated in vivo.
Species	Leishmania infantum
Source	E.coli
Description	The protein K39 is a repetitive immunodominant epitope in a kinesin-related protein that is highly conserved among viscerotropic Leishmania species. It has been described that a rK39 ELISA is sensitive and specific for serodiagnosis of human and canine VL.
Tag	N-His
Conjugation/Label	Biotin
Molecular Mass	Determined by SDS-PAGE, the protein band is between molecular markers of 35 and 45 kDa, while relative molecular mass calculated from amino acid sequence is 35,241.81 Da.
Purity	> 95% by observation on SDS-PAGE electrophoresis
Applications	WB, DB, CE, DAS, NP, PO

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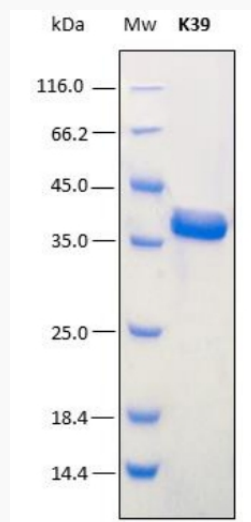
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Storage	Upon arrival, it should be aliquoted to avoid repeated freezing and thawing cycles and stored at -20 to -80 centigrade. In order to defrost the protein, maintain the aliquot at 25 centigrade without shaking to avoid aggregation.
Storage Buffer	20 mM phosphate buffer pH 8, 1 M NaCl and 0.1% polyoxyethylene (10) tridecyl ether
Concentration	1.16 mg/mL
Shipping	Protein is shipped with dry ice.
Reference	1. Scalone, A., de Luna, R., Oliva, G., Baldi, L., Satta, G., Vesco, G., Mignone, W., Turilli, C., Mondesire, R.R., Simpson, D., Donoghue, A.R., Frank, G.R., Gradoni, L. Evaluation of the Leishmania recombinant K39 antigen as a diagnostic marker for canine leishmaniasis and validation of a standardized enzymelinked immunosorbent assay. 2002, Vet. Parasitol. 104:275–285. 2. Bradford, MM. A rapid and sensitive method for the quantitation of microgram quantities of protein utilizing the principle of protein dye binding. Anal Biochem. 1976, 131:499-503.
Conjugation	Biotin
PROTEIN CONCENTRATION DETERMINED ESPECTROPHOTOMETRICALLY	 The graph shows a linear relationship between BSA concentration (µg) on the x-axis and DO 595 on the y-axis. The x-axis ranges from 0 to 100 µg, and the y-axis ranges from 0 to 1.2. Four data points are plotted, and a line of best fit is drawn through them. The regression equation is $y = 0,0121x + 0,0442$ and the coefficient of determination is $R^2 = 0,9923$.

This protein does not contain any Trp residues. Experience shows that this could result in more than 10% error in the computed extinction coefficient. Therefore, we have measured the protein concentration by using the colorimetric assay based on the interaction between Coomassie brilliant blue and the arginine and aromatic residues and its maximum absorption shifts from 470 nm to 595 nm. The standard curve was performed with the protein BSA. 40 μ L of the protein were analyzed.

Purity



SDS-PAGE analysis (15%) of 3 μ L of recombinant K39. Purity is > 98% as determined by gel electrophoresis. Bands which slightly appear under the main one, correspond to this same protein as it is showed in a western blot performed with a his-tag monoclonal antibody.