

CYSTICERCOSIS ANTIGEN ELISA REF: 650501 **∠** CE MARKED

∠ QUALITATIVE ASSAY

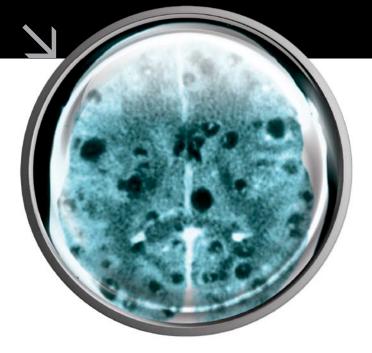
□ ANALYTICAL SENSITIVITY: 1 cyst is detectable in certain conditions

☑ INCUBATION TIMES: assay 45 minutes + sample preparation < 30 minutes
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☑ AVAILABLE FORMAT: 96T

CYSTICERCOSIS ANTIGEN ELISA





CYSTICERCOSIS AG ELISA

WHAT? The apDia Cysticercosis Antigen (Ag) ELISA is a sandwich Enzyme Linked Immunosorbent Assay (ELISA) based on monoclonal antibodies for the qualitative determination of viable metacestodes (cysticerci) of Taenia spp. in human and porcine serum samples.

WHY? Taenia solium cysticercosis is an infection of humans and pigs with the metacestode larvae (cysticercus) of Taenia solium. Circulating antigen detection in serum is an important diagnostic method that indicates the presence of viable parasites. The monoclonal antibodies used in this assay are produced against excretory secretory products (ESP) of viable T. saginata cysticerci. The glycoprotein antigens detected by these monoclonal antibodies are present on the tegument and in the excretory secretory products of meta-

> The assay demonstrates the presence of viable cysticerci only, it does not detect degenerated or calcified cysticerci. In this respect, unlike antibody detection, measurement of circulating antigen levels allows differentiation of cysticercosis cases with viable parasites, with antigen levels correlating to the numbers and size of lesions. It can as such also provide a tool for serological monitoring of antiparasitic therapy in human or pigs: antigen levels drop rapidly after successful anthelminthic treatment.

Porcine cysticercosis

The assay is genus specific, not species specific. The assay does not allow the differentiation between infections of different Taenia species in pigs. In experimentally infected pigs, circulating antigens were first detected between 2 and 6 weeks post infection and remained present generally throughout an observation period of 6 months, even in pigs carrying only five to eight living cysts. The minimum number of living cysts, that could be detected using the cysticercosis Ag ELISA, was one.

Human cysticercosis

Because *T. solium* is the only *Taenia* sp. causing cysticercosis in man, the test is specific. No cross-reactions were observed with sera from patients with other parasitologically and/or serologically confirmed infections. The sensitivity of the assay decreases when the number of viable cysts is low; infections with one viable cyst are often not detectable. Antigen levels are generally higher in extraparenchymal neurocysticercosis (NCC) (particularly subarachnoid NCC) than in intraparenchymal NCC; therefore, high antigen levels should lead one to suspect the presence of extraparenchymal NCC.

