Version 14-08/24

User's Manual

Cathepsin-Ab ELISA Kit

REF **DEIABL327**

Σ **96T**

RUO

This product is for research use only and is not intended for diagnostic use.

For illustrative purposes only. To perform the assay the instructions for use provided with the kit have to be used.

Creative Diagnostics

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PRODUCT INFORMATION

Intended Use

Cathepsin-Ab ELISA is a solid phase enzyme immunoassay employing native human Cathepsin G for the quantitative and qualitative detection of antibodies against Cathepsin G in human serum.

General Description

Cathepsin-Ab ELISA is a solid phase enzyme immunoassay employing native human Cathepsin G for the quantitative detection of antibodies against Cathepsin G in human serum. The assay is a tool in the diagnosis of autoimmune systemic vasculitis. Antibodies against Cathepsin G, a neutral serine proteinase, belong to the group of anti-neutrophil cytoplasmic antibodies (ANCA) which are directed against cytoplasmic components of neutrophilic granulocytes and monocytes. For the detection of ANCAs indirect immunofluorescence test on ethanolfixed neutrophils has been the established method so far. It became apparent that some ANCAs create a cytoplasmic fluorescence pattern (thus called cANCA) while others create a perinuclear pattern (the pANCA). As both patterns may cover multiple antigens, immunofluorescence does not suffice for a satisfying differential diagnosis of vasculitis; thus each IFT should be verified with specific ELISA tests. Proteinase 3 (PR3) and Myeloperoxidase (MPO) have been identified as the major cANCA and pANCA antigens, respectively, but other cellular components like Lactoferrin, Cathepsin G and Elastase cause perinuclear staining, too and therefore are included into the group of pANCAs. Detection of ANCAs is a useful laboratory diagnostic test for certain small vessel vasculitides and some non-vasculitic clinical syndromes, such as inflammatory bowel disease (IBD). Antibodies against MPO correlate with idiopathic or vasculitis associated necrotizing crescentic glomerulonephritis. They are found frequently in 70% of patients with microscopic polyangiitis as well as 5-50% of patients with Churg-Strauss syndrome. Autoantibodies to PR3 are a specific serological marker for Wegener's granulomatosis (WG). Antibodies against Lactoferrin and Cathepsin G were identified in a subgroup of patients with inflammatory bowel disease. However, these ANCA specificities do not appear to correlate with disease activity.

Storage

2-8°C

Precision

Intra-Assay		
Sample No.	Mean (U/ml)	CV (%)
1	194.0	5.8
2	61.0	4.3
3	35.0	2.1

Inter-Assay		
Sample No.	Mean (U/ml)	CV (%)
1	192.0	4.8
2	59.0	4.5
3	33.0	3.7

Detection Range

0 - 300 U/mL, cut-off 15 U/mL

Sensitivity

1.0 U/ml

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