

Seprion[™]-**PAD**

Tools for Protein Aggregation Disease Diagnostics

Microsens Seprion Technology™



CJD-EIA

A second generation method for the rapid and simple detection of Creutzfeldt Jakob Disease (CJD) in brain, lymphoid and spleen tissues

Easy

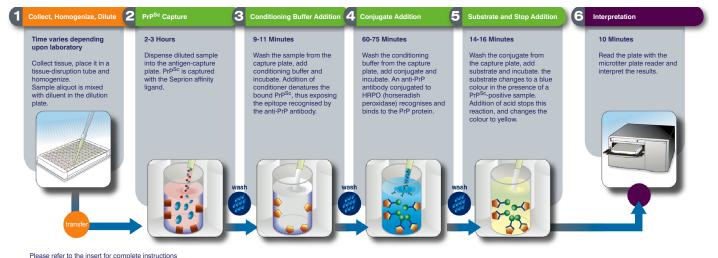
• Homogenize sample • Dilute sample • Run EIA

Simple

• No proteinase K • No centrifuge • Fewer plate transfers • Limited hands-on time

Robust

• All room-temperature • Not time sensitive • Less risk of false +ve & -ve results



Proven established technology

Chosen by the UK Health Protection Agency for the **UK vCJD Tonsil Study**

Microsens Seprion Technology[™] – at the heart of the world's fastest growing TSE Kits

(The Idexx HerdChek BSE, BSE/Scrapie and CWD kits)

For research use only

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Seprion[™]-**PAD**

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CJD-EIA

Microsens **CJD-EIA** uses a version of Microsens's unique Seprion ligand technology (**Seprion-PAD**) that captures the abnormal (aggregated) prion protein (PrPSc) present in a wide range of Prion Diseases from their normal counterparts, whether PK resistant OR PK sensitive. (Lane et al. 2003. Clinical Chemistry 49:1774-1775, Patent Pending WO/03/073106)

The **Seprion-PAD** ligand is the critical core component of:

• the Idexx Herdcheck (http://www.idexx.com/production/ruminant/ruminant8.jsp) series of commercial tests for BSE, scrapie and CWD that have been extensively evaluated and have received EU and USDA approvals

AND

• the CJD tests being used by the Health Protection Agency for the epidemiologoical study of CJD in tonsils (http://www.hpa.org.uk/infections/topics_az/cjd/tonsil_archive.htm).

CJD-EIA test kit is a simple 96 well microplate based assay solution for the detection of the aggregated form of Prion Protein (PrPSc) associated with Prion Diseases such as CJD and vCJD, GSS, FFI and other Prion TSE's. It is best used for the detection of aggregates in Brain, Lymph, Spleen and other solid tissues.

The simple robust ELISA type implementation and its ease of automation make **CJD-EIA** the ideal screening tool, whether manual or automated.

For a more sensitive approach or where larger or fluid volumes are required to be interrogated, the Microsens **PAD-Beads** kit offers a unique solution. Based on the same unique ligand system as the **CJD-EIA**, **PAD-Beads** is a Seprion ligand coated magnetic bead based sample preparation system that can simply and effectively extract and concentrate the aggregated form of Prion Protein (PrPSc) from a sample that can then be combined with a back-end commercial or in-house ELISA or Western blot analysis.

PAD-Beads, can also be used to easily and simply separate the abnormal, pathological (aggregated) forms of proteins present in a wide and expanding range of Protein Aggregation Diseases from their normal counterparts, where protease digestion is not an option for sample preparation, such as β-amyloid and tau, α-synuclein, and huntingtin, in Alzheimer's, Parkinson's and Huntington's Disease. (**PAD-Beads** is likely to work with other Protein Aggregation Diseases including: amylin in Diabetes Type II; crystalline in cataracts; antibody light chain, serum amyloid A, and β2-microglobulin in amyloid including primary and secondary systemic amyloidosis; and superoxide dismutase 1 in amyotrophic lateral sclerosis but these diseases remain to be tested with **PAD-Beads**.)

CJD-EIA Kit Components

Stop solution - 25 mL

S

Item	(1 x 96 well plate)
Α	Antigen-capture plate - 1 plate
N	Negative control - Nonreactive with antigen-capture plate; preserved with sodium azide, 1 x 1 mL
Р	Positive control - Noninfectious, reactive with capture plate; preserved with sodium azide, 1 x 1 mL
D1	Plate diluent component 1- preserved with sodium azide, 5 mL
D2	Plate diluent component 2- 1 x 200 µL
D3	Plate Diluent component 3- 1 x 300 µL
R	Reconstitution buffer- 5 mL
СВ	Conditioning buffer- preserved with sodium azide, 15 mL
CC	Conjugate concentrate- preserved with Bronidox L and methylisothiazolone, 300µL
CD	Conjugate diluent- buffer with detergents and protein stabilizers; preserved with kathon, 60 mL
W1	10X wash solution 1- preserved with sodium azide, 100 mL
W2	10X wash solution 2- preserved with gentamicin, 100 mL
Т	TMB substrate - 60 mL

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