

## Diagnostika prionů – stručný přehled metod

Method	Mechanism	Prot K-sens PrP <sup>Sc</sup>	Target Specimens	Notes	Commercial Kits
Non Amplification					
Western Blot	PrP antibody stain	No	Tissue	Can detect strain types.	Prionics-Check Western
ELISA	PrP antibody stain	No	Tissue, blood	Convenient for antigen capture enrichment.	Prionics Check, Enfer TSE, Bio-Rad TeSeE, Roboscreen Beta Prion BSE, Institut Pourquier Speed'it BSE, Roche PrionScreen, IDEXX HerdChek BSE
IHC	PrP antibody stain	No	Tissue	Can show locations in the tissue, but may miss antigen inactivated PrP <sup>Sc</sup> .	Ventana IHC Systems
CDI	Conformation dependent immunoassay using epitope protection	Yes	Tissue	Can detect strain types.	InPro CDI-5, Ceditect BSE
DELFI	Dissociation-Enhanced Lanthanide Fluorescent Immunoassay, measures percentage of insoluble PrP <sup>Sc</sup>	Yes	Tissue, Blood	Integrated time-resolved fluorescence signal.	PE DELFIA TRF
MPD	misfolded protein diagnostic, attached excimer fires when the peptide converts to $\beta$ -sheet conformation	Yes	Tissue, Blood	Simple steps without using any antibody.	None
SOFIA	Surround optical fiber immunoassay	Yes	Tissue, Blood, Urine	Cooperating multiple antibodies.	None
<i>In vitro</i> Amplification					
Cell BioAssay	Detects PrP <sup>Sc</sup> in inoculated cells	No	Tissue, Blood	Amplified signal, sometimes has species barriers.	None
PMCA	Protein misfolding cyclic amplification	Yes	Tissue, Blood, CSF, Urine	Amplified signal.	None

Method	Mechanism	Prot K-sens PrP <sup>Sc</sup>	Target Specimens	Notes	Commercial Kits
ASA	Amyloid seeding assay, uses amyloid dye ThT	Yes	Tissue,Blood, CSF	Amplified signal, low background, needs precipitation step in seed preparation.	None
RT-QUIC	Real-time quaking-induced conversion, uses amyloid dye ThT	Yes	Tissue,Blood,Nasal Swab	Amplified signal, has simple shaking step and low background.	None
<i>In vivo</i> Amplification					
Animal BioAssay	Measures ID50 or LD50 in inoculated animals	Yes	Tissue, blood, urine, saliva	Amplified signs, but costly and sometimes has species barriers.	