

## PAD4 Inhibitor Screening Assay Kit

### Product Information

**Cat.No.**

Kit-1994

**Size**

96 wells

**Description**

Protein Arginine Deiminase 4 (PAD4) is a guanidino-modifying enzyme that functions as a transcriptional coregulator catalyzing the conversion of specific arginine residues to citrulline. Substrates for PAD4 include histones H2A, H3, and H4. PAD4 autocitrullinates itself at several sites, inhibiting its enzymatic activity. PAD4 activity is increased in rheumatoid arthritis, producing an abundance of citrulline-containing proteins that generate an immune response resulting in production of autoantibodies that ultimately attack the host tissues. PAD4 has also been implicated in several other diseases including multiple sclerosis, Alzheimer's disease, glaucoma, and cancer. The PAD4 Inhibitor Screening Assay (Ammonia) provides a convenient, fluorescence-based method for screening human PAD4 inhibitors.

**Storage**

-80°C

**Kit Components**

PAD Assay Buffer: 1 vial/30 ml; -20°C PAD4 (human recombinant) Assay Reagent: 2 vials/60 µl; -80°C PAD Substrate: 2 vials/lyophilized; -20°C PAD Stop Solution: 2 vials/1.2 ml; -20°C PAD Ammonia Detector: 2 vials/lyophilized; -20°C Ethanol Assay Reagent: 1 vial/2 ml; RT 96-Well Solid Plate (black): 1 plate; RT 96-Well Cover Sheet: 1 cover; RT