

## **Lay Summary**

**BRAIN UK Ref: 22/004**

### **Validation of Trimethyl Histone H3 (Lys27) Antibody**

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Every year, approximately one in every 100,000 people across the world develop a cancer that affects cells that form the sheath that covers and protects nerves throughout the body. This cancer is known as malignant peripheral nerve sheath tumour (MPNST). Whilst rare, MPNST is considered aggressive with a survival rate as low as 25% after 5 years. Correctly diagnosing MPNST is difficult because these tumours can look very similar to other common tumours and diagnostic tools currently available to doctors are limited. A common and rapid method used in making this diagnosis is to “stain” a piece of tumour on a glass slide and then look at this stain for certain “markers” under a microscope. Finding specific markers through staining can lead to a much quicker diagnosis which would allow patients to start treatment earlier. We wish to investigate a marker that can specifically tell the difference between MPNST and other common tumours. Our goal is to introduce a new tool for doctors to use which could allow for a more confident and timely diagnosis for patients.