Monoclonal Antibody to Polyglutamine
Polyglutamine-expansion diseases Marker

Monoclonal antibody 5TF1-1C2 recognizes a homopolymeric glutamine stretch. The original immunogen was the general transcription factor TATA box-binding protein (TBP) which contains a Gln\textsubscript{38} stretch (Lescure et al.) Other polyglutamine-containing proteins are recognized by the 5TF1-1C2 antibody, notably those involved in several human neurodegenerative diseases caused by a CAG repeat expansion. These include Huntington’s disease and spinocerebellar ataxia type 2,3 and 7 (Trottier et al Nature). Importantly, for proteins involved in these neurodegenerative disorders, the 5TF1-1C2 antibody shows superior detection of pathological proteins that contain a polyglutamine expansion (>37 glutamine residues) than the wild type proteins (Trottier & al 1995, 1998). 5TF1-1C2 has been used to identify new neurodegenerative diseases caused by polyglutamine expansion and to help for cloning of the corresponding affected genes (Trottier 1995-1998 ; Imbert 1996; Stevanin 1996). 5TF1-1C2 is also able to detect intracellular inclusions, which is a hallmark of such diseases (Paulson 1997).

| Product Number: | T-1448 (Lot 01PO1112) |
| Clone: | 5TF1-1C2 |
| Host species, isotype: | Mouse IgG1 kappa |
| Quantity: | 100\(\mu\)g |
| Format: | Affinity purified, lyophilized |
| | Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.2mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% Kathon as a preservative. |
| Stability: | Original vial: 1 year at 4° - 8°C Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing. |
| Applications: | Tested for immunohistochemistry (IHC). Approximate working dilution for IHC: Frozen sections: not tested Paraffin sections: 4\(\mu\)g/ml (1:50); microwave pretreatment in citrate buffer is recommended for antigen retrieval. Optimal dilutions should be determined by the end user. Suggested positive control: human brain cortex. Please see [www.bma.ch](http://www.bma.ch) for protocols and general information. |
| Immunogen: | N-terminal part of human TATA Box Binding Protein (TBP). |
Antigen, epitope: The antigen is a homopolymeric glutamine stretch.
Antigen distribution: The literature indicates that most of the normal tissues show moderate nuclear and cytoplasmic immunoreactivity. Most cells in CNS and placenta are stained. Spleen and liver are weakly stained.
Specificity: Human: Polyglutamine.
Other: Expected but not tested.

Selected references


For in vitro research only. This product contains Kathon as a preservative.