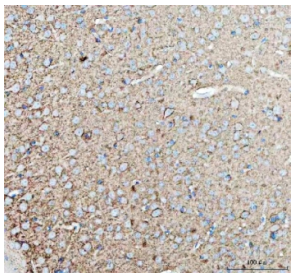
# TNR Antibody / Tenascin-R (R30781)

| Catalog No. | Formulation | Size |
|---|---|---|
| R30781 | 0.5mg/ml if reconstituted with 0.2ml sterile DI water | 100 ug |

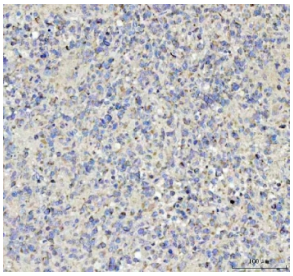
**Bulk quote request**

| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Antigen affinity purified |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Antigen affinity |
| **Buffer** | Lyophilized from 1X PBS with 2% Trehalose |
| **UniProt** | Q92752 |
| **Applications** | Western Blot : 0.5-1ug/ml<br>Immunohistochemistry (FFPE) : 2-5ug/ml<br>Flow Cytometry : 1-3ug/million cells |
| **Limitations** | This TNR antibody is available for research use only. |

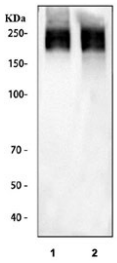


IHC staining of FFPE mouse brain tissue with TNR antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

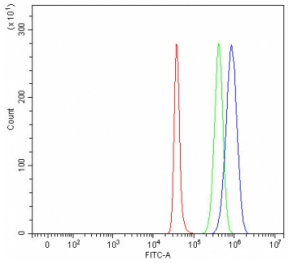
IHC staining of FFPE rat brain tissue with TNR antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



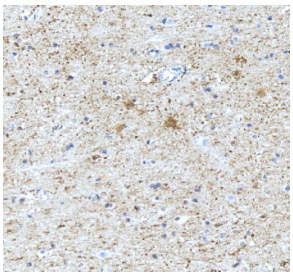
IHC staining of FFPE human glioma tissue with TNR antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.




Western blot testing 1) mouse brain and 2) rat brain tissue lysate with TNR antibody. Predicted molecular weight ~150 kDa.




Flow cytometry testing of fixed human SH-SY5Y cells with TNR antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= TNR antibody.



IHC staining of FFPE human brain tissue with TNR antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.

## Description

TNR (Tenascin-R) is a neural extracellular matrix glycoprotein that belongs to the tenascin family, which also includes Tenascin-C, Tenascin-W, and Tenascin-X. Unlike its family members, TNR expression is restricted to the central nervous system, where it plays an important role in neuronal adhesion, axonal guidance, and synaptic plasticity. A TNR antibody is widely used to study neural development, extracellular matrix composition, and neuroplasticity.

TNR is composed of epidermal growth factor (EGF)-like repeats, fibronectin type III domains, and a fibrinogen-like domain, which together mediate cell-cell and cell-matrix interactions. It is expressed predominantly by oligodendrocytes and subsets of neurons, localizing in perineuronal nets that regulate synaptic activity and stabilization. Using a TNR antibody allows researchers to investigate how Tenascin-R influences neuronal connectivity, synaptic remodeling, and myelination.

Functionally, TNR has been shown to modulate axonal growth, inhibit nerve regeneration in some contexts, and regulate synaptic transmission by interacting with various cell surface receptors and extracellular proteins. Dysregulation of TNR expression has been associated with neurological disorders, including schizophrenia, epilepsy, and demyelinating diseases. Employing a TNR antibody provides researchers with a tool to examine its role in both normal neural physiology

and disease pathology.

NSJ Bioreagents offers a high-quality TNR antibody validated for applications such as western blot, immunohistochemistry, and immunofluorescence. Selecting a TNR antibody from NSJ Bioreagents ensures reliable results and reproducibility in studies of the extracellular matrix, neural development, and disease mechanisms.

## Application Notes

The stated application concentrations are suggested starting amounts. Titration of the TNR antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

An amino acid sequence from the N-terminus of mouse Tenascin-R (QTSDHESQVTFTHK) was used as the immunogen for this TNR antibody (100% rat homology).

## Storage

After reconstitution, the TNR antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.