

**Mouse Anti-TOX3 / TNRC9 [TOX3/1123]: MC0098**

**Intended Use:** For Research Use Only

**Description:** It recognizes a 63kDa protein, which is identified as TOX3. It contains a high mobility group (HMG)-box, which regulates Ca<sup>2+</sup>-dependent transcription in neurons through interaction with the cAMP-response-element-binding protein (CREB). TOX3 appears to be associated with breast cancer susceptibility and is expressed downstream of a cytoprotective cascade together with CITED1, a transcriptional regulator that does not bind directly to DNA. TOX3 is predominantly expressed in the brain and forms homodimers. TOX3 overexpression protects neuronal cells from cell death caused by endoplasmic reticulum stress or BAX overexpression through the induction of anti-apoptotic transcripts and repression of pro-apoptotic transcripts.

**Specifications**

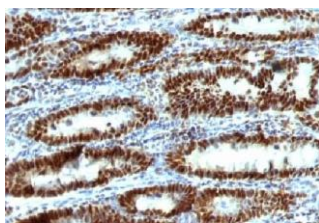
Clone: TOX3/1123  
 Source: Mouse  
 Isotype: IgG2b/k  
 Reactivity: Human  
 Localization: Cytoplasm, nucleus  
 Formulation: Protein A/G purified antibody from bioreactor concentrate. Prepared in 10mM PBS with 0.2% BSA and < 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles  
 Applications: IHC, Flow Cyt, ICC/IF  
 Package:

Description	Catalog No.	Size
TOX3 / TNRC9 Concentrated	MC0098	1 ml

**IHC Procedure\***

Positive Control Tissue: SH-SY5Y, MDA-MB-435 cells. Brain or breast or gastric Carcinoma  
 Concentrated Dilution: 50-200  
 Pretreatment: EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human gastric carcinoma stained with anti-TOX3 using DAB

**References**

1. IL-1 $\alpha$  Gene Deletion Protects Oligodendrocytes after Spinal Cord Injury through Upregulation of the Survival Factor Tox3. Bastien D, et al. J Neurosci. Jul 29;35(30):10715-30, 2015.
2. TOX3 regulates calcium-dependent transcription in neurons. Yuan SH, et al. Proc Natl Acad Sci U S A. Feb 24;106(8): 2909-14, 2009.
3. Genes associated with breast cancer metastatic to bone. Smid, M., et al. J. Clin. Oncol. 24: 2261-2267, 2006.
4. TOX defines a conserved subfamily of HMG-box proteins. O'Flaherty, E., et al. BMC Genomics 4: 13, 2003.