

**TLX2 Antibody**  
**Catalog # ASC11662****Specification**

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**TLX2 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">O43763</a>
Other Accession	<a href="#">NP_057254</a> , <a href="#">7706621</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 31 kDa

Application Notes	Observed: 30 kDa KDa TLX2 antibody can be used for detection of TLX2 by Western blot at 0.5 - 1 µg/mL.
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**TLX2 Antibody - Additional Information**

Gene ID 3196

**Target/Specificity**

TLX2; TLX2 antibody is predicted to not cross-react with other TLX proteins.

**Reconstitution & Storage**

TLX2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

**Precautions**

TLX2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**TLX2 Antibody - Protein Information**

**Name** TLX2

**Synonyms** HOX11L1, NCX

**Function**

Transcription activator that binds DNA elements with the consensus sequence 5'-CGGTAATTGG-3'. Binds DNA via its homeobox. Required for normal cell death of enteric neurons in the gastrointestinal tract. Required for normal development of the enteric nervous system, and for proper development of normal motility of the gastrointestinal tract (By similarity).

**Cellular Location**

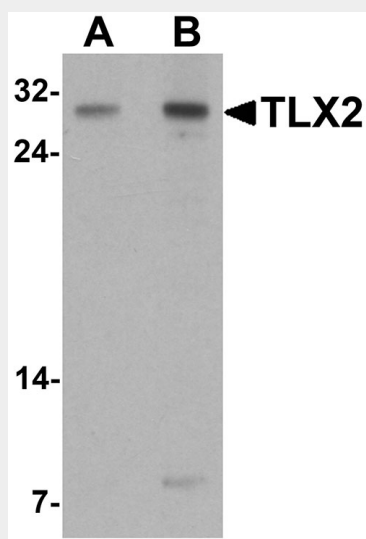
Nucleus.

**TLX2 Antibody - Protocols**

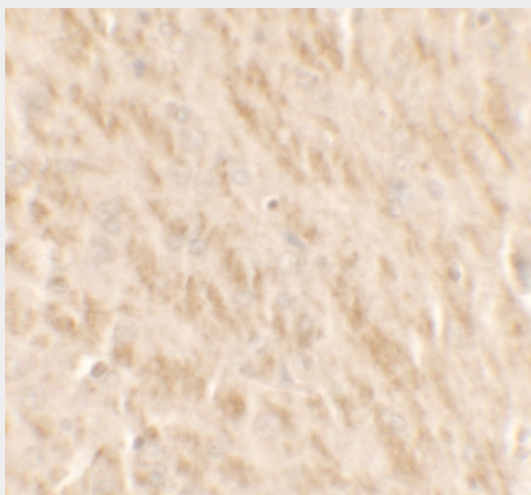
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

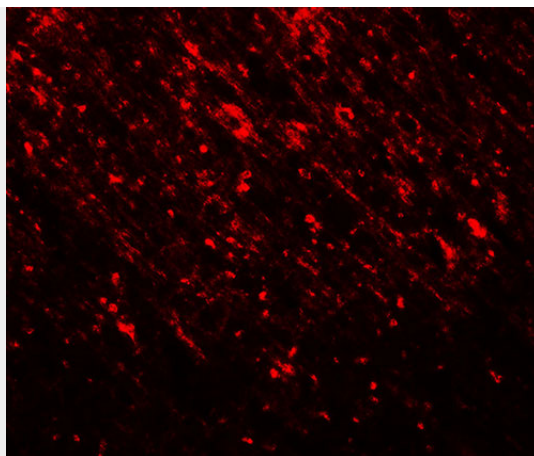
#### TLX2 Antibody - Images



Western blot analysis of TLX2 in rat brain tissue lysate with TLX2 antibody at (A) 0.5 and (B) 1  $\mu\text{g/mL}$ .



Immunohistochemistry of TLX2 in rat brain tissue with TLX2 antibody at 2.5  $\mu\text{g/mL}$ .



Immunofluorescence of TLX2 in rat brain tissue with TLX2 antibody at 20 µg/ml.

### **TLX2 Antibody - Background**

**TLX2 Antibody:** The Hox proteins play a role in patterns of embryonic development and cellular differentiation by regulating downstream target genes. TLX2, also known as homeobox11-like 1 (HOX11L1), is a DNA-binding nuclear transcription factor that appears to be crucial for the development of the peripheral nervous system. TLX2 is a downstream target of regulation by both PHOX2A and PHOX2B proteins during intestinal neuronal differentiation. In humans, loss-of-function of TLX2 may play a role in tumorigenesis of gastrointestinal stromal tumors.

### **TLX2 Antibody - References**

Dear TN, Sanchez-Garcia I, and Rabbitts TH, et al. The Hox11 gene encodes a DNA-binding nuclear transcription factor belonging to a distinct family of homeobox genes. *Proc. Natl. Acad. Sci. USA* 1993; 90:4431-5.

Puliti A, Cinti R, Betsos N, et al. HOX11L1, a gene involved in peripheral nervous system development, maps to human chromosome 2p13.1>p12 and mouse chromosome 6C3-D1. *Cytogenet. Cell Genet.* 1999; 84:115-7.

Borghini S, Di Duca M, Santamaria G, et al. Transcriptional regulation of TLX2 and impaired intestinal innervation: possible role of the PHOX2A and PHOX2B genes. *Eur. J. Human Genet.* 2007; 15:848-55.

Borghini S, Bachetti T, Fava M, et al. The TLX2 homeobox gene is a transcriptional target of PHOX2B in neural crest derived cells. *Biochem. J.* 2006; 395:355-61.