

**Docket #:** S01-245C

# AntiPbx2 monoclonal antibody

Researchers in the laboratory of Dr. Michael Cleary at Stanford University have developed anti-Pbx2 monoclonal antibodies to study transcriptional regulation, embryonic development, and tissue homeostasis. *Pbx2* is one of four mammalian genes that encode closely related TALE (three amino acid loop extension) homeodomain proteins that serve as binding partners for a subset of Hox to function as transcriptional regulators in numerous cell types. *Pbx2* is widely expressed during mouse embryonic development, particularly in neural and epithelial tissues during late gestation. In postnatal bone marrow and thymus, Pbx2 is the predominant high-molecular-weight isoform Pbx protein. The anti-Pbx2 antibodies could be used in research related to embryonic development and hematopoiesis.

## Applications

- **Research** related to:
  - embryonic development (particularly in the brain and epithelium)
  - hematopoiesis
  - transcriptional regulation

## Publications

- Selleri L, DiMartino J, van Deursen J, Brendolan A, Sanyal M, Boon E, Capellini T, Smith KS, Rhee J, Popperl H, Grosveld G, Cleary ML. ["The TALE homeodomain protein Pbx2 is not essential for development and long-term survival."](#) *Mol Cell Biol.* 2004 Jun;24(12):5324-31.

## Innovators

- Michael Cleary

- Mrinmoy Sanyal

## **Licensing Contact**

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