

DESCRIPTION

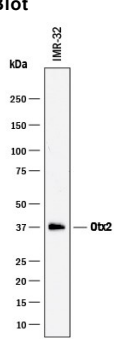
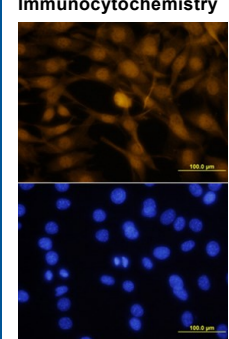

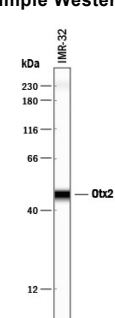

Species Reactivity	Human
Specificity	Detects human Otx2 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Otx2 Met1-Leu289 Accession # P32243
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	1-15 µg/mL	See Below
Simple Western	10 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human Otx2 by Western Blot. Western blot shows lysates of IMR-32 human neuroblastoma cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human Otx2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1979) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Otx2 at approximately 37 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>Otx2 in Ntera-2 Human Cell Line. Otx2 was detected in immersion fixed Ntera-2 human testicular embryonic carcinoma cell line using Goat Anti-Human Otx2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1979) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (yellow, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
<p>Immunohistochemistry</p>  <p>Otx2 in Mouse Embryo. Otx2 was detected in immersion fixed paraffin-embedded sections of mouse embryo (14 d.p.c.) using Goat Anti-Human Otx2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1979) at 1 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC004). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to developing nervous system. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>	<p>Simple Western</p>  <p>Detection of Human Otx2 by Simple Western™. Simple Western lane view shows lysates of IMR-32 human neuroblastoma cell line, loaded at 0.2 mg/mL. A specific band was detected for Otx2 at approximately 48 kDa (as indicated) using 10 µg/mL of Goat Anti-Human Otx2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1979) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p> 

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Otx2 is a member of the bicoid subfamily of homeodomain-containing transcription factors. It may play a role in brain and sensory organ development (1). Isoform a differs from isoform b by having an eight amino acid residue insertion between P32 and A33 of Otx2b.

References:

1. Nagao, T. *et al.* (1998) Proc. Natl. Acad. Sci. USA **95**:3737.