

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SOX17 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) SOX18 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human SOX17 Asp177-Val414 Accession # Q9H6I2
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	1-2 µg/mL	See Below
Chromatin Immunoprecipitation (ChIP)	5 µg/5 x 10 ⁶ cells	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Simple Western	10 µg/mL	See Below

DATA

Western Blot

Detection of Human SOX17 by Western Blot. Western blot shows lysates of BG01V human embryonic stem cells untreated (-) or endoderm differentiated (+). PVDF membrane was probed with 1 µg/mL of Goat Anti-Human SOX17 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1924) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for SOX17 at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Chromatin Immunoprecipitation (ChIP)

Detection of SOX17-regulated Genes by Chromatin Immunoprecipitation. Endoderm-differentiated D3 mouse embryonic stem cell line was fixed using formaldehyde, resuspended in lysis buffer, and sonicated to shear chromatin. SOX17/DNA complexes were immunoprecipitated using 5 µg Goat Anti-Human SOX17 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1924) or control antibody (Catalog # AB-108-C) for 15 minutes in an ultrasonic bath, followed by Biotinylated Anti-Goat IgG Secondary Antibody (Catalog # BAF109). Immunocomplexes were captured using 50 µL of MagCollect Streptavidin Ferrofluid (Catalog # MAG999) and DNA was purified using chelating resin solution. The p21 promoter was detected by standard PCR.

Immunocytochemistry

SOX17 in B16 Mouse Cell Line. SOX17 was detected in immersion fixed B16 mouse melanoma cell line using 10 µg/mL Goat Anti-Human SOX17 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1924) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counter-stained with DAPI (blue). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunocytochemistry

SOX17 in Human BG01V Cells. SOX17 was detected in immersion fixed endoderm differentiated BG01V human embryonic stem cells using 10 µg/mL Goat Anti-Human SOX17 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1924) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Simple Western

Detection of Human SOX17 by Simple Western™. Simple Western lane view shows lysates of BG01V human embryonic stem cells untreated (-) or endoderm differentiated (+), loaded at 0.2 mg/mL. A specific band was detected for SOX17 at approximately 59 kDa (as indicated) using 10 µg/mL of Goat Anti-Human SOX17 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1924) 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.

Simple Western

Detection of Human SOX17 by Simple Western™. Simple Western lane view shows lysates of iBJ6 human induced pluripotent stem cell line untreated (-) or endoderm differentiated (+), loaded at 0.2 mg/mL. A specific band was detected for SOX17 at approximately 58 kDa (as indicated) using 10 µg/mL of Goat Anti-Human SOX17 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1924) 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.

Western Blot

Detection of Human SOX17 by Western Blot. Western blot shows lysates of SK-OV-3 human ovarian adenocarcinoma cell line, OVCAR-3 human ovarian carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Goat Anti-Human SOX17 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1924) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for SOX17 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Western Blot Buffer Group 1.

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

SOX17 is a member of the SOX family of transcription factors that bind DNA via a high mobility group (HMG) domain. SOX17 is suggested to play an important role in endoderm development (1, 2).

References:

1. Kanai-Azuma, M. *et al.* (2002) *Development* **129**:2367.
2. Katoh, M. *et al.* (2002) *Int. J. Mol. Med.* **9**:153.