

Product Datasheet

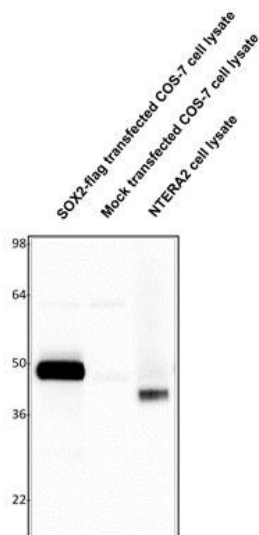
Chickens make *better* antibodies.

Anti-SOX2 Antibody

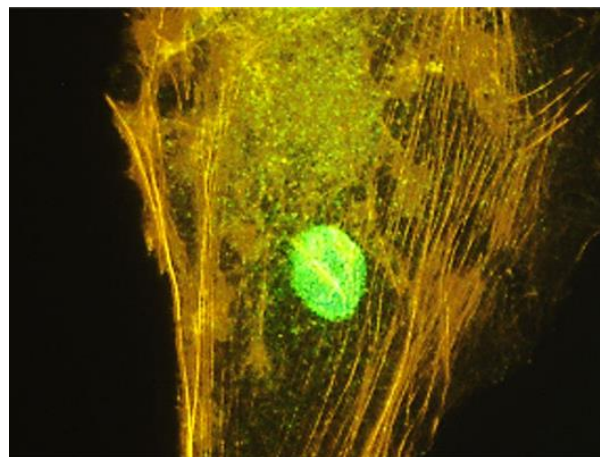
Overview

Catalog #	SOX2-0100 (500 μ L size) or SOX2-0020 (100 μ L size)
Concentration	0.2 mg/mL
Host Species	Chicken Polyclonal
Format	Affinity-Purified IgY
Buffer	Phosphate-buffered (10 mM) isotonic (0.9%, w/v) saline ("PBS," pH 7.2) with sodium azide (0.02%, w/v) added as a preservative.
Applications	ICC 1:100-1:500 WB 1:500-1:1000
Species Reactivity	Human, Mouse, and Rat
Immunogen	His tagged full-length protein
Molecular Weight	35 kDa
Cite this Antibody	Aves Labs Cat# SOX2-0100 or Aves Labs Cat# SOX2-0020; RRID: AB_3068326

Images



Western blotting of SOX2-FLAG transfected COS-7 cell lysate (10 μ g/lane), mock transfected COS-7 cell lysate (10 μ g/lane) and NTERA2 cell lysate (10 μ g/lane) and stained with Aves Labs anti-SOX2 antibody (1 μ g/mL). Note that SOX2 runs at higher molecular weight in lane 1 due to presence of tandem Myc/FLAG tag on recombinant protein relative to endogenous SOX2 in lane 3.



Immunofluorescent staining of NTERA2 cells stained with Aves Labs anti-SOX2 antibody (green) showing strong nuclear staining of endogenous SOX2. Actin filaments are stained with phalloidin (red).

Details

Target Description	SOX2, short for SRY (Sex-Determining Region Y)-Box 2, belongs to the SOX family of proteins which play essential roles in cell differentiation, development, and organogenesis. A transcription factor, SOX2 aids in the embryonic formation of the central nervous system and neural progenitor cells. It helps to maintain the pluripotency of embryonic stem cells, allowing them to differentiate. In adult tissues, SOX2 aids in neural tissue regeneration and repair, as well as the maintenance of adult neural stem cells and their ability to develop into different specialized cell types, essential for neural plasticity. Mutations or dysregulation of SOX2 have been linked to a range of neurological diseases, including neurodevelopmental disorders like aniridia (Matsushima 2011), and optic nerve hypoplasia and septo-optic dysplasia (McCabe 2010). SOX2 has also be implicated in certain brain tumors, particularly in gliomas, where its dysregulation can contribute to uncontrolled cell proliferation (Mansouri 2016).
Purification Method	Eggs from hens hyperimmunized with target were used to prepare an IgY fraction which was then subjected to antigen-specific affinity purification.
Quality Control Tests	Each new lot of this antibody is tested in WB to confirm that it recognizes a single immunoreactive band of expected molecular weight when used to probe brain lysate.
Storage	Store at 4°C in the dark. Under these conditions, the antibodies should have a shelf life of at least twelve months, provided they remain sterile. For longer term storage, aliquot and freeze to avoid freeze-thaw of the antibody.

Our Guarantee

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