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| CA1096 | <b>SOX2</b>  | <br>Orders 866 372-7442<br>& Support support@primorigen.com<br>Web www.primorigen.com |
|        | <b>Monoclonal Antibody (PR-5G12)</b>                                       |  |
|        | <b>Prod. No. S2175-100UG</b>   |  |
|        | <i>For Research Use Only<br/>Not intended for use in humans or animals</i> |  |

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|----------------------------|-------------|
| <b>Reacts with</b>         | Human*      |
| <b>Tested Applications</b> | Flow, ELISA |
| <b>Host</b>                | Mouse       |
| <b>Clone</b>               | PR-5G12     |
| <b>Isotype</b>             | IgG2a, κ    |

\*Other species not tested

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| <b>Size:</b> 100 µg  |
| <b>Immunogen:</b> Recombinant full-length human SOX2 expressed in <i>E. coli</i> and refolded to soluble form.   |
| <b>Purification:</b> Protein G chromatography  |
| <b>Formulation:</b> 0.983 mg/ml in PBS   |
| <b>Purity:</b> >90% by SDS-PAGE  |
| <b>Storage:</b> Store at 4°C (<3 months) or -20°C. Avoid multiple freeze-thaws.  |
| <b>Recommended Uses:</b>   |
| ELISA (detect) 1:1000  |
| Flow Cytometry 1µg/10 <sup>5</sup> cells   |
| <b>Note:</b> Optimal concentrations should be empirically determined.  |
| IC50: 684 ng/ml  |
| <b>Note:</b> Represents the dilution factor, starting from 1 mg/ml of monoclonal antibody, where 50% of the ELISA signal is present against the antigen used as the immunogen. |
| <b>Target Alternative Names:</b> Sex-determining region Y-box 2, SRY-box 2, ANOP3, MCOPS3, MGC2413   |
| <b>Target Database Links:</b>  |
| RefSeq Protein NP_003097.1   |
| RefSeq Gene NM_003106.2  |
| UniProt P48431   |

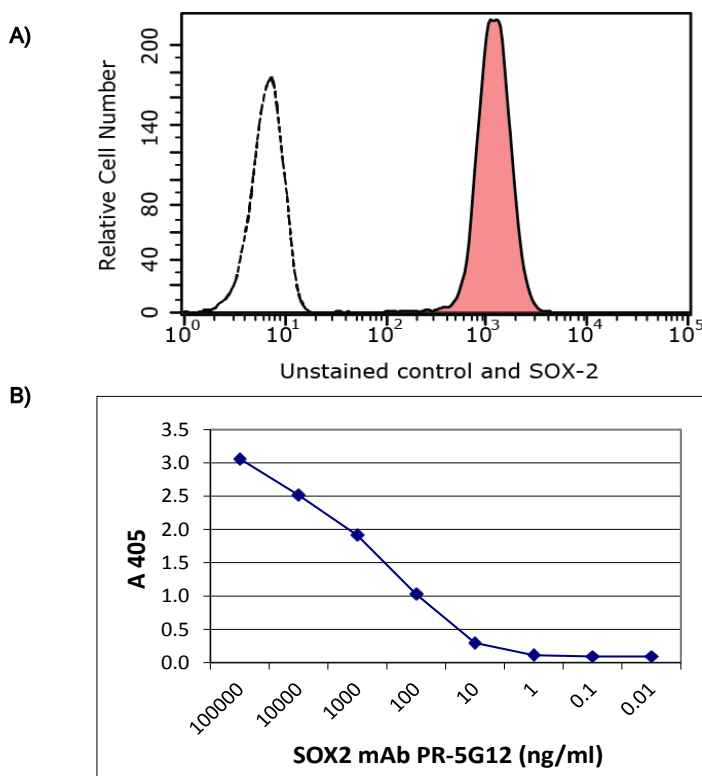
**Background:** SOX2 is a member of the large family of sex determining region Y-related HMG-box (SOX) transcription factors. SOX2 is expressed in embryonic stem cell lines, and decreased levels of SOX2 interfere with self renewal and pluripotency. SOX2 has been identified as one of the key regulators for induced pluripotent stem (iPS) cells. The DNA binding domain (AA 41-109) shows significant homology to other SOX family members, while the N-terminal (AA 1-38) and C-terminal (AA 194-317) regions are unique. The Sox2 gene itself contains no introns but lies within an intron of the SOX2 overlapping transcript (SOX2OT) gene.

### Applications:

**A) Flow Cytometry.** Detection of SOX2 in human iPSCs using 1µg antibody stained with anti-mouse IgG FITC Conjugate F(ab')<sub>2</sub>.

**B) ELISA** Indirect ELISA detection of immobilized SOX2 immunogen with titrated amounts of SOX2 mAb (PR-5G12).

*Note: Representative data are shown (not Lot-specific).*



**Warranty:** Each Lot has been verified to meet quality specifications in accordance with testing guidelines. We will replace the product if it does not conform to specifications. Product guaranteed for 6 months from date of purchase if stored as directed. This product must not be resold without written permission from Primorigen Biosciences.