

# INO80D (D-20): sc-139498

## BACKGROUND

The INO80 complex contributes to a wide variety of chromatin-dependent nuclear transactions, including transcription, DNA repair and DNA replication. Evolutionarily conserved from yeast to human, the INO80 complex belongs to a subfamily of the ATP-dependent chromatin remodelers and is characterized by a split ATPase domain in the core ATPase subunit. ATP-dependent chromatin remodeling complexes contain ATPases of the Swi/Snf superfamily and alter DNA accessibility of chromatin in an ATP-dependent manner. INO80D (INO80 complex subunit D), is an 878 amino acid protein that is a component of the chromatin-remodeling INO80 complex.

## REFERENCES

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2. Jin, J., et al. 2005. A mammalian chromatin remodeling complex with similarities to the yeast INO80 complex. *J. Biol. Chem.* 280: 41207-41212.
3. Bao, Y., et al. 2007. INO80 subfamily of chromatin remodeling complexes. *Mutat. Res.* 618: 18-29.
4. Ford, J., et al. 2008. Activator-dependent recruitment of SWI/SNF and INO80 during INO1 activation. *Biochem. Biophys. Res. Commun.* 373: 602-606.
5. Papamichos-Chronakis, M., et al. 2008. The Ino80 chromatin-remodeling enzyme regulates replisome function and stability. *Nat. Struct. Mol. Biol.* 15: 338-345.
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7. Klopff, E., et al. 2009. Cooperation between the INO80 complex and histone chaperones determines adaptation of stress gene transcription in the yeast *S. cerevisiae*. *Mol. Cell. Biol.* 29: 4994-5007.
8. Morrison, A.J., et al. 2009. Chromatin remodelling beyond transcription: the INO80 and SWR1 complexes. *Nat. Rev. Mol. Cell Biol.* 10: 373-384.
9. Conaway, R.C., et al. 2009. The INO80 chromatin remodeling complex in transcription, replication and repair. *Trends Biochem. Sci.* 34: 71-77.

## CHROMOSOMAL LOCATION

Genetic locus: INO80D (human) mapping to 2q33.3; Ino80d (mouse) mapping to 1 C2.

## SOURCE

INO80D (D-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of INO80D of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139498 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

INO80D (D-20) is recommended for detection of INO80D of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with INO80B, INO80C or INO80E.

INO80D (D-20) is also recommended for detection of INO80D in additional species, including canine, bovine and avian.

Suitable for use as control antibody for INO80D siRNA (h): sc-94738, INO80D siRNA (m): sc-140642, INO80D shRNA Plasmid (h): sc-94738-SH, INO80D shRNA Plasmid (m): sc-140642-SH, INO80D shRNA (h) Lentiviral Particles: sc-94738-V and INO80D shRNA (m) Lentiviral Particles: sc-140642-V.

Molecular Weight of INO80D: 98 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.