# Nup205 (A-14): sc-104478



The Power to Question

#### **BACKGROUND**

The nuclear pore complex (NPC) mediates bidirectional macromolecular traffic between the nucleus and cytoplasm in eukaryotic cells and is comprised of more than 100 different subunits. Many of the subunits belong to a family called nucleoporins (Nups), which are characterized by the presence of Olinked-N-acetylglucosamine moieties and a distinctive pentapeptide repeat (XFXFG). Nup205 (nucleoporin 205 kDa), also known as C7orf14 or KIAA0225, is a 2,012 amino acid that localizes to the nucleus and functions as an essential component of the nuclear pore complex. The gene encoding Nup205 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

## **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: NUP205 (human) mapping to 7q33; Nup205 (mouse) mapping to 6 B1.

#### **SOURCE**

Nup205 (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Nup205 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104478 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Nup205 (A-14) is recommended for detection of Nup205 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Nup205 (A-14) is also recommended for detection of Nup205 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for Nup205 siRNA (h): sc-89531, Nup205 siRNA (m): sc-150120, Nup205 shRNA Plasmid (h): sc-89531-SH, Nup205 shRNA Plasmid (m): sc-150120-SH, Nup205 shRNA (h) Lentiviral Particles: sc-89531-V and Nup205 shRNA (m) Lentiviral Particles: sc-150120-V.

Molecular Weight of Nup205: 228 kDa.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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 or our catalog for detailed protocols and support products.



Try **Nup205 (H-1): sc-377047**, our highly recommended monoclonal alternative to Nup205 (A-14).