# abcam

# Product datasheet

# Anti-Wnt10a antibody ab106522

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#### Overview

Product name Anti-Wnt10a antibody

**Description** Rabbit polyclonal to Wnt10a

Host species Rabbit

**Specificity** Despite the high homology of Wnt10a to Wnt10b, ab106522 will not cross-react with Wnt10b.

**Tested applications** Suitable for: ICC/IF, WB, IHC-P

**Species reactivity** Reacts with: Mouse, Human

**Immunogen** A 14 amino acid synthetic peptide from near the C terminus of Human Wnt10a (UniProt Q9GZT5).

Positive control WB: RAW264.7 cell lysate. IHC-P: Human and mouse skeletal muscle tissue; Rat bladder tissue.

ICC/IF: Human skeletal muscle cells.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or

contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at 4°C (stable for up to 12 months).

Storage buffer pH: 7.2

Preservative: 0.02% Sodium azide

Constituent: PBS

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

## **Applications**

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#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab106522 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 20 µg/ml.
WB		Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 46 kDa. <b>Not validated in human.</b>
IHC-P	*** <u>*</u> (1)	Use at an assay dependent concentration.

#### **Target**

#### **Function**

Ligand for members of the frizzled family of seven transmembrane receptors. Probable developmental protein. May be a signaling molecule important in CNS development. Is likely to signal over only few cell diameters.

#### Involvement in disease

Defects in WNT10A are a cause of ectodermal dysplasia anhidrotic (EDA) [MIM:224900]; also known ectodermal dysplasia hypohidrotic autosomal recessive (HED). Ectodermal dysplasia defines a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. EDA is characterized by sparse hair (atrichosis or hypotrichosis), abnormal or missing teeth and the inability to sweat due to the absence of sweat glands. Note=Most patients carrying WNT10A mutations present with sweating anomalies. However, comparison with EDA cases harboring mutations in the ectodysplasin pathway identifies some phenotypic differences. Dermatological features (anomalies of hair and sweat glands) are less severe in patients carrying WNT10A mutations and facial dysmorphism can be absent. The dental phenotype consists in microdontia, whereas teeth agenesis is more frequent in patients carrying mutations in the ectodysplasin pathway.

Defects in WNT10A are a cause of odonto-onycho-dermal dysplasia (OODD) [MIM:257980]. OODD is a rare autosomal recessive ectodermal dysplasia in which the presenting phenotype is dry hair, severe hypodontia, smooth tongue with marked reduction of fungiform and filiform papillae, onychodysplasia, keratoderma and hyperhidrosis of palms and soles, and hyperkeratosis of the skin.

Defects in WNT10A are a cause of Schopf-Schulz-Passarge syndrome (SSPS) [MIM:224750]. SSPS is rare ectodermal dysplasia, characterized chiefly by cysts of the eyelid margins, palmoplantar keratoderma, hypodontia, hypotrichosis and nail dystrophy. Multiple eyelid apocrine hidrocystomas are the hallmark of this condition, although they usually appear in adulthood. The concomitant presence of eccrine syringofibroadenoma in most patients and of other adnexal skin tumors in some affected subjects indicates that Schopf-Schulz-Passarge syndrome is a genodermatosis with skin appendage neoplasms.

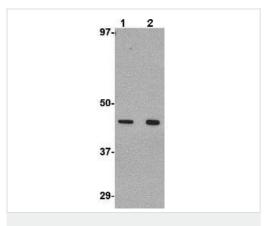
# Sequence similarities

Belongs to the Wnt family.

**Cellular localization** 

Secreted > extracellular space > extracellular matrix.

#### **Images**



Western blot - Anti-Wnt10a antibody (ab106522)

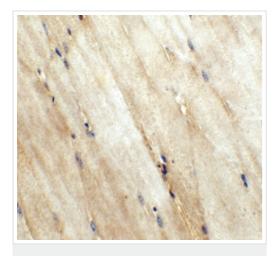
Lane 1 : Anti-Wnt10a antibody (ab106522) at 1  $\mu g/ml$ 

Lane 2: Anti-Wnt10a antibody (ab106522) at 2 µg/ml

All lanes: RAW264.7 cell lysate

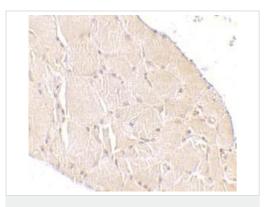
Lysates/proteins at 15 µg per lane.

Predicted band size: 46 kDa



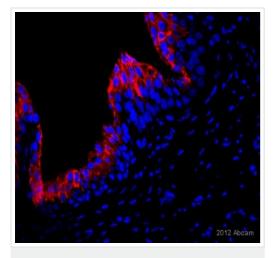
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Wnt10a antibody (ab106522)

Paraffin-embedded mouse skeletal muscle tissue stained for Wnt10a using ab106522 at 5  $\mu$ g/ml in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Wnt10a antibody (ab106522)

Paraffin-embedded human skeletal muscle tissue stained for Wnt10a using ab106522 at 10  $\mu g/ml$  in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Wnt10a antibody (ab106522)

This image is courtesy of an anonymous Abreview

Immunohistochemical analysis of rat bladder tissue, staining Wnt10a with ab106522.

Tissue was fixed with formalin and blocked with 5000  $\mu$ g/ml BSA for 30 minutes at 22°C; antigen retrieval was by heat mediation in citrate buffer (pH 6). Samples were incubated with primary antibody (1/100 in BSA) for 1 hour at 22°C. An AlexaFluor®555-conjugated goat anti-rabbit polyclonal lgG (1/400) was used as the secondary antibody.

Immunocytochemistry/ Immunofluorescence - Anti-Wnt10a antibody (ab106522) Immunofluorescence of Wnt10a in Human Skeletal Muscle cells using ab106522 at 20 ug/ml.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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