# abcam

# Product datasheet

# Anti-GPR54 antibody ab137483

1 References 1 Image

Overview

Product name Anti-GPR54 antibody

**Description** Rabbit polyclonal to GPR54

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide corresponding to Human GPR54 aa 309-362.

Positive control 293T, A431, H1299, HeLa, HepG2 and Raji cell lysates

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. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.00

Preservative: 0.01% Thimerosal (merthiolate)

Constituents: 49.99% PBS, 50% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

**Applications** 

The Abpromise guarantee Our Abpromise guarantee covers the use of ab137483 in the following tested applications.

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

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Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 43 kDa.

#### **Target**

#### **Function**

Receptor for metastin (kisspeptin-54 or kp-54), a C-terminally amidated peptide of KiSS1. KiSS1 is a metastasis suppressor protein that suppresses metastases in malignant melanomas and in some breast carcinomas without affecting tumorigenicity. The metastasis suppressor properties may be mediated in part by cell cycle arrest and induction of apoptosis in malignant cells. The receptor is essential for normal gonadotropin-released hormone physiology and for puberty. The hypothalamic KiSS1/KISS1R system is a pivotal factor in central regulation of the gonadotropic axis at puberty and in adulthood. The receptor is also probably involved in the regulation and fine-tuning of trophoblast invasion generated by the trophoblast itself. Analysis of the transduction pathways activated by the receptor identifies coupling to phospholipase C and intracellular calcium release through pertussis toxin-insensitive G(q) proteins.

#### Tissue specificity

Most highly expressed in the pancreas, placenta and spinal cord, with lower-level of expression in peripheral blood leukocytes, kidney, lung, fetal liver, stomach, small intestine, testes, spleen, thymus, adrenal glands and lymph nodes. In the adult brain, expressed in the superior frontal gyrus, putamen, caudate nucleus, cingulate gyrus, nucleus accumbens, hippocampus, pons and amygdala, as well as the hypothalamus and pituitary. Expression levels are higher in early (7-9 weeks) than term placentas. Expression levels were increased in both early placentas and molar pregnancies and were reduced in choriocarcinoma cells. Expressed at higher levels in first trimester trophoblasts than at term of gestation. Also found in the extravillous trophoblast suggesting endocrine/paracrine activation mechanism.

#### Involvement in disease

Defects in KISS1R are a cause of idiopathic hypogonadotropic hypogonadism (IHH) [MIM:146110]. IHH is defined as a deficiency of the pituitary secretion of follicle-stimulating hormone and luteinizing hormone, which results in the impairment of pubertal maturation and of reproductive function.

Defects in KISS1R are a cause of central precocious puberty (CEPREPU) [MIM:176400]. Precocious puberty is defined as the development of secondary sexual characteristics before the age of 8 years in girls and 9 years in boys. Central precocious puberty refers to a gonadotropin-dependent type which results from premature activation of the hypothalamic-pituitary-gonadal axis.

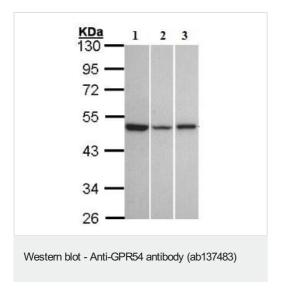
#### Sequence similarities

Belongs to the G-protein coupled receptor 1 family.

### Cellular localization

Cell membrane.

## **Images**



All lanes: Anti-GPR54 antibody (ab137483) at 1/1000 dilution

Lane 1 : A431 whole cell lysate
Lane 2 : HeLa whole cell lysate

Lane 3: HepG2 whole cell lysate

Lysates/proteins at 30 µg per lane.

Predicted band size: 43 kDa

10% SDS PAGE

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

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