abcam

Product datasheet

Anti-CHRND antibody [1H1F9] ab233758

4 Images

Overview

Product name	Anti-CHRND antibody [1H1F9]
Description	Mouse monoclonal [1H1F9] to CHRND
Host species	Mouse
Tested applications	**Suitable for:** WB, Flow Cyt
Species reactivity	**Reacts with:** Rat, Human
Immunogen	Recombinant fragment corresponding to Human CHRND aa 1-250. Expressed in E.coli. Database link: **Q07001** Run BLAST with Run BLAST with
Positive control	WB: Recombinant human CHRND protein (AA: extra 22-245); C6 and CHRND (AA: extra 22-245)-hIgGFc transfected HEK-293 whole cell lysate. Flow: SK-N-SH 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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein G purified
Clonality	Monoclonal
Clone number	1H1F9
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab233758 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
WB		1/500 - 1/2000.
Flow Cyt		1/200 - 1/400.

Target

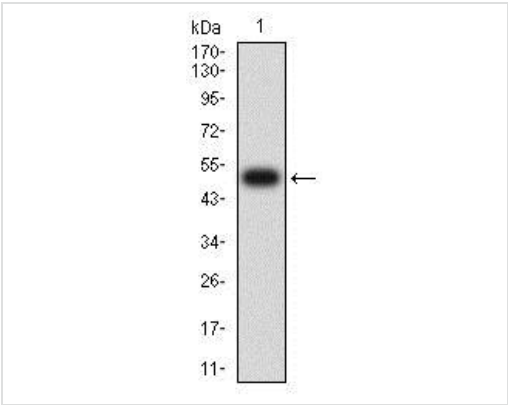
Function After binding acetylcholine, the AChR responds by an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane.

Involvement in disease Defects in CHRND are a cause of multiple pterygium syndrome lethal type (MUPSL) [MIM:253290]. Multiple pterygia are found infrequently in children with arthrogryposis and in fetuses with fetal akinesia syndrome. In lethal multiple pterygium syndrome there is intrauterine growth retardation, multiple pterygia, and flexion contractures causing severe arthrogryposis and fetal akinesia. Subcutaneous edema can be severe, causing fetal hydrops with cystic hygroma and lung hypoplasia. Oligohydramnios and facial anomalies are frequent.
Defects in CHRND are a cause of congenital myasthenic syndrome slow-channel type (SCCMS) [MIM:601462]. SCCMS is the most common congenital myasthenic syndrome. Congenital myasthenic syndromes are characterized by muscle weakness affecting the axial and limb muscles (with hypotonia in early-onset forms), the ocular muscles (leading to ptosis and ophthalmoplegia), and the facial and bulbar musculature (affecting sucking and swallowing, and leading to dysphonia). The symptoms fluctuate and worsen with physical effort. SCCMS is caused by kinetic abnormalities of the AChR, resulting in prolonged endplate currents and prolonged AChR channel opening episodes.
Defects in CHRND are a cause of congenital myasthenic syndrome fast-channel type (FCCMS) [MIM:608930]. FCCMS is a congenital myasthenic syndrome characterized by kinetic abnormalities of the AChR. In most cases, FCCMS is due to mutations that decrease activity of the AChR by slowing the rate of opening of the receptor channel, speeding the rate of closure of the channel, or decreasing the number of openings of the channel during ACh occupancy. The result is failure to achieve threshold depolarization of the endplate and consequent failure to fire an action potential.

Sequence similarities Belongs to the ligand-gated ion channel (TC 1.A.9) family. Acetylcholine receptor (TC 1.A.9.1) subfamily. Delta/CHRND sub-subfamily.

Cellular localization Cell junction > synapse > postsynaptic cell membrane. Cell membrane.

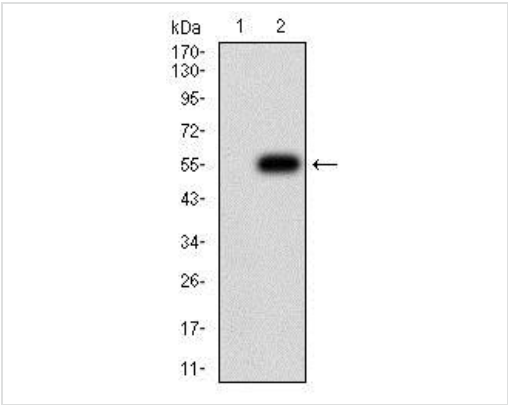
Images



Western blot - Anti-CHRND antibody [1H1F9] (ab233758)

Anti-CHRND antibody [1H1F9] (ab233758) at 1/500 dilution + Recombinant human CHRND (AA: extra 22-245)

Developed using the ECL technique.

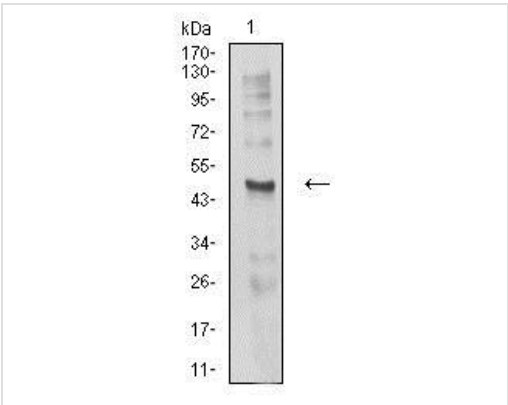


Western blot - Anti-CHRND antibody [1H1F9] (ab233758)

All lanes : Anti-CHRND antibody [1H1F9] (ab233758) at 1/500 dilution

Lane 1 : HEK-293 (human epithelial cell line from embryonic kidney) whole cell lysate
Lane 2 : CHRND (AA: extra 22-245)-hIgGFc transfected HEK-293 whole cell lysate

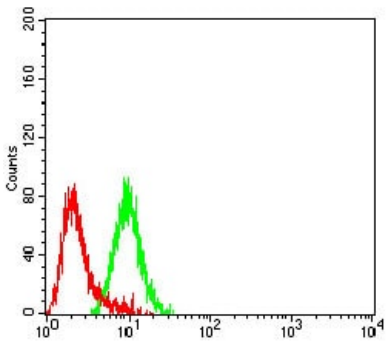
Developed using the ECL technique.



Western blot - Anti-CHRND antibody [1H1F9] (ab233758)

Anti-CHRND antibody [1H1F9] (ab233758) at 1/500 dilution + C6 (rat glial tumor cell line) whole cell lysate

Developed using the ECL technique.



Flow Cytometry - Anti-CHRND antibody [1H1F9] (ab233758)

Flow cytometric analysis of SK-N-SH (human neuroblastoma cell line) cell line labeling CHRND with ab233758 at 1/200 dilution (green) compared with a negative control (green).

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