

Product Specification Sheet

Human Brain derived neurotrophic factor (BDNF) Antibody

<input type="checkbox"/> Cat# CLAT11-A	Rabbit anti-Arabidopsis Thaliana Catalase-1 (Cat-1) pAb, affinity purified	SIZE: 100 ug
<input type="checkbox"/> Cat# CLAT11-P	Control/Blocking peptide for Catalase-1 antibody	SIZE: 500 ug

Catalase is an enzyme found in most living organisms which are catalyzing decomposition of hydrogen peroxide to water and oxygen. In plant cells catalase is found in peroxisomes. This enzyme is involved in photorespiration and symbiotic nitrogen fixation. Catalase occurs in almost all aerobically respiring organisms and serves to protect cells from the toxic effects of hydrogen peroxide.

Source of Antigen or Antibodies

Uniprot: Q96528

Host: Rabbit

Form: Polyclonal, antigen affinity purified over a peptide column

Immunogen: Synthetic peptide derived from Arabidopsis Thaliana Catalase-1 conjugated to KLH.

Species Reactivity: Arabidopsis Thaliana

Cross reactivity: Has over 90% homology with various other plants. Reactivity has not been assessed in other species.

Subcellular Location: Cytoplasm

Induction: By hydrogen peroxide. By abscisic acid (ABA), drought, and salt stress through the MKK-1MPK6 mediation.

Isoforms: N/A

Recommended Secondary Antibody: Goat anti-Rabbit IgG-HRP

Negative Control: Non immune Rabbit IgG (**ADI cat# 20009-1**). Blocking peptide (**ADI cat# CLAT11-P**), use 5-10 ug of control peptide per 1 ug of affinity pure antibody or 1 ul antiserum to confirm specificity.

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG

_____ ul solution; Concentration: _____
Supplied in PBS pH 7.4 +0.05% Azide

lyophilized powder

Reconstitute powder in 200 ul PBS to 0.5 mg/ml

Control/blocking peptide

500 ug/500 ul solution lyophilized powder

Reconstitute powder in PBS at 1 mg/ml.

Storage:

Short-term: 4°C for 1 month

Long-term: at -20°C or below in suitable aliquots after reconstitution for 1 year. Do not expose to multiple freeze/thaw cycles or store working, diluted solutions.

Recommended Usage

ELISA: Assay dependent concentration. Typically 0.1-2.0 ug/ml for capture/detection antibodies.

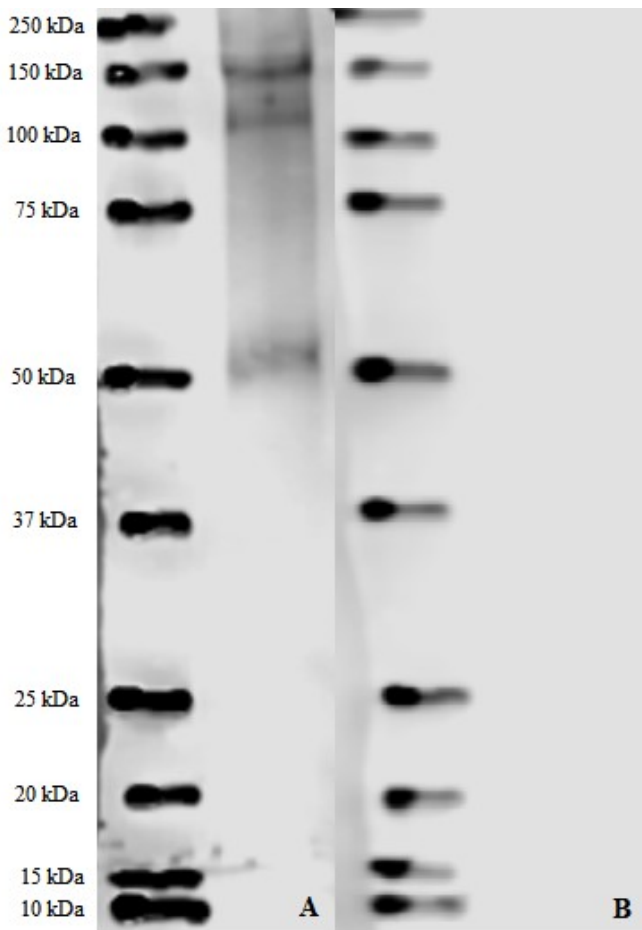
Western Blotting: 0.5-2 ug/ml using affinity pure.
Theoretical band size: 56.7 kDa
Observed Band size: ~56 kDa

*Above concentrations are a suggestion and user's must optimize assay based on their conditions. Antibody may work in other applications such as Flow Cytometry, IF, or IHC. These methods have not been tested by ADI.

**This product is for In vitro research use only.*

Related materials available from ADI

Catalog#	Description
RBCL11-A	Rabbit anti Arabidopsis thaliana Ribulose biphosphate carboxylase (RuBisCO) IgG, affinity pure
CLAT11-A	Rabbit anti Arabidopsis thaliana Catalase-1 (Cat-1) IgG, affinity pure
JAR11-A	Rabbit anti Arabidopsis thaliana Jasmonic acid-amido synthetase (JAR1) IgG, affinity pure
PMYO11-A	Rabbit anti Arabidopsis thaliana Myosin 1 IgG, affinity pure
POL111-A	Rabbit anti Arabidopsis thaliana Polymerase Gamma 1 IgG, affinity pure
POL211-A	Rabbit anti Arabidopsis thaliana Polymerase Gamma 2 IgG, affinity pure
PSBS11-A	Rabbit anti-Arabidopsis Thaliana Photosystem II 22 kDa protein, chloroplastic (PSBS) IgG, affinity pure
PACT11-A	Rabbit anti Arabidopsis thaliana Actin-1 (ACT1) IgG affinity pure, loading control for WB
TUBA111-A	Rabbit anti Arabidopsis thaliana Tubulin alpha-1 chain (TUBA1) IgG affinity pure
TUBB211-A	Rabbit anti Arabidopsis thaliana Tubulin beta-2 chain (TUBB2) IgG affinity pure



25 ug of total Arabidopsis thaliana lysate was heated for 5 minutes at 95°C then loaded onto a 10% SDS-PAGE gel (Biorad). Gels were run for ~1 hour and 30 minutes at 100V and transferred to a 0.2 um nitrocellulose membrane using the mixed MW settings on a Transblot Turbo (Biorad). Ladders were annotated with ADI antigen-antibody pen and blocked for 1 hour at room temperature with 1% Fish plasma (Aquablock, EastCoastBio). **Figure A:** CLAT11-A was diluted with TBST+3% BSA to 1 ug/ml and incubated overnight at 4°C. **Figure B:** 1 ug/ml was pre-incubated with 10 ug of blocking peptide per 1 ug of antibody and mixed for 1 hour before being incubated overnight at 4°C. Blot was washed with TBS-T 3 times for 5 minutes. Goat anti-rabbit IgG HRP (**ADI cat#20320**) was added at 1:5,000 dilution (0.1 ug/ml) for 1 hour at room temperature. Blot was washed 3 times with TBS-T for 5 minutes. ADI Femto ECL substrate (**ADI cat#80210**) was added for 5 minutes and the blot was imaged on a LI-COR C-digit high sensitivity settings. Specific band is observed at ~55 kDa. Non-specific band seen at ~150kDa and 110 kDa.