

Drosophila DJ-1B (C-term) Blocking Peptide

Synthetic peptide Catalog # BP6418a

Specification

Drosophila DJ-1B (C-term) Blocking Peptide - Product Information

Primary Accession

09VA37

Drosophila DJ-1B (C-term) Blocking Peptide - Additional Information

Gene ID 43652

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6418a was selected from the C-term region of human Drosophila DJ-1B (C-term). A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Drosophila DJ-1B (C-term) Blocking Peptide - Protein Information

Name dj-1beta {ECO:0000312|FlyBase:FBgn0039802}

Function

Plays an important role in cell protection against oxidative stress and cell death by acting as a oxidative stress sensor (PubMed:16139214, PubMed:16203113, PubMed:16894167, PubMed:20457924). Does not play a role in methylglyoxal detoxification (PubMed:27903648). Plays a role in mitochondrial function together with Pink1 (PubMed:20457924). In motor neurons regulates structural synaptic plasticity of locomotor behavior as part of the PTEN-phosphatidylinositol 3-kinase pathway in response to oxygen species (ROS) levels (PubMed:30540251/a>).

Cellular Location

Mitochondrion. Cytoplasm. Nucleus



Tissue Location

Expressed in the head and testis (at protein level) (PubMed:16139213). Ubiquitously expressed at constant levels (PubMed:16139214).

Drosophila DJ-1B (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

Drosophila DJ-1B (C-term) Blocking Peptide - Images

Drosophila DJ-1B (C-term) Blocking Peptide - Background

DJ-1 mutations are associated with rare forms of autosomal recessive early-onset Parkinson's disease (PD). DJ-1 is suggested to normally function as a redox-sensitive molecular chaperone protective against cellular oxidative stress. DJ-1 Drosophila models are an important tool for elucidating protein function and for modeling neurodegenerative disease.

Drosophila DJ-1B (C-term) Blocking Peptide - References

Moore DJ, et al. Sci Aging Knowledge Environ. 2006 Jan 11;2006(2):pe2. Park J, et al. Gene. 2005 Nov 21;361:133-9. Yang Y, et al. Proc Natl Acad Sci U S A. 2005 Sep 20;102(38):13670-5. Menzies FM, et al. Curr Biol. 2005 Sep 6;15(17):1578-82. Meulener M, et al. Curr Biol. 2005 Sep 6;15(17):1572-7. Meulener M, et al. J Neurochem. 2005 Jun;93(6):1524-32.