Store at -200

9



Entrez-Gene Id:

7019

MW (kDa): UniProt ID: **Applications:** Reactivity: Sensitivity: Source/Isotype: W, W-S, IP, IHC-P, н Endogenous 24 Rabbit IgG #Q00059 IF-IC, eCLIP Product Usage Application Dilution Information Western Blotting 1:1000 Simple Western™ 1:50 - 1:250 Immunoprecipitation 1:50 Immunohistochemistry (Paraffin) 1:100 - 1:400 Immunofluorescence (Immunocytochemistry) 1:100 - 1:200 eCI IP 1.200 For more information about the RBP-eCLIP service please visit Eclipsebio. Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Storage Specificity/Sensitivity TFAM (D5C8) Rabbit mAb recognizes endogenous levels of total TFAM protein. Source / Purification Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val225 of human TFAM protein. Background TFAM (Transcription Factor A, Mitochondrial; aka TCF6) is a member of the high-mobility group (HMG) proteins because it contains two HMG boxes. TFAM is a transcription factor for mitochondrial DNA (mtDNA), and enhances mtDNA transcription in a promoter-specific fashion in the presence of mitochondrial RNA polymerase and transcription factor B (1). Because the majority of ATP production depends on the mitochondrial respiratory chain, maintenance of the mitochondrial genome is critical for normal health. TFAM plays an essential role in the maintenance of mtDNA and thus, ATP production (2). TFAM binds to mtDNA both nonspecifically and in a sequence-specific manner. It is known to have a dual effect on mtDNA: protection of mtDNA and initiation of transcription from mtDNA (3). TFAM attenuates age-dependent impairment of the brain by preventing oxidative stress and mitochondrial dysfunctions in microglia (4). **Background References** 1. Kanki, T. et al. (2004) Mol Cell Biol 24, 9823-34. 2. Kang, D. et al. Mitochondrion 7, 39-44. 3. Watanabe, A. et al. (2011) Cardiovasc Res, Epub ahead of print. 4. Hayashi, Y. et al. (2008) J Neurosci 28, 8624-34.

Species reactivity is determined by testing in at least one approved application (e.g., western blot). Species Reactivity Western Blot Buffer IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween[®] 20 at 4°C with gentle shaking, overnight. Applications Key W: Western Blotting W-S: Simple Western™ IP: Immunoprecipitation IHC-P: Immunohistochemistry (Paraffin) IF-IC: Immunofluorescence (Immunocytochemistry) eCLIP: eCLIP Cross-Reactivity Key H: Human Trademarks and Patents Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for

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