



LD Biopharma, Inc.
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<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human SKA2 Protein
Catalog Number: hRP-1467
Manufacturer: LD Biopharma, Inc.

Introduction

Human spindle and kinetochore-associated protein 2 (SKA2) is a component of the SKA1 complex, a microtubule-binding subcomplex of the outer kinetochore that is essential for proper chromosome segregation. Required for timely anaphase onset during mitosis, when chromosomes undergo bipolar attachment on spindle microtubules leading to silencing of the spindle checkpoint. The SKA1 complex is a direct component of the kinetochore-microtubule interface and directly associates with microtubules as oligomeric assemblies. The complex facilitates the processive movement of microspheres along a microtubule in a depolymerization-coupled manner. In the complex, it is required for SKA1 localization. Recent data indicated that SKA2 might influence suicidal phenotypes through its role in chaperoning the glucocorticoid receptor from cytoplasm to the nucleus.

Full-length mature human SKA2 cDNA (121aa) was constructed with fully codon optimization strategy and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal. This protein is expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: SKA2 (FAM33a)
Accession Number: NP_872426.1
Species: Human
Size: 50 µg / Vial
Composition: 1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose, DTT .
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.



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Key References

Jerry Guintivano, et al., *Identification and replication of a combined epigenetic and genetic Biomarker predicting suicide and suicidal behaviors*. American Journal of Psychiatry. doi:10.1176/appi.ajp.2014.14010008.

Jeyaprakash AA, et al., *Structural and functional organization of the Ska complex, a key component of the kinetochore-microtubule interface*
Mol. Cell 46 (3), 274-286 (2012)

Cao G, et al., *Intronic miR-301 feedback regulates its host gene, ska2, in A549 cells by targeting MEOX2 to affect ERK/CREB pathways*. Biochem. Biophys. Res. Commun. 396 (4), 978-982 (2010)

Applications

1. May be used for in vitro human SKA2 mediated neuronal response with stress hormones regulation study with this protein as either coating matrix protein or soluble factor.
2. May be used for protein-protein interaction assay.
3. As antigen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHGNLYFQGGEFEAEVDKLELMFQKAESDLDYIQYRLEYEIKTNHPD
SASEKNPVTLKELSVIKSRYQTLYARFKPVAVEQKESKSRICATVKKTMNMIQKLQKQTDLEL
SPLTKEEKTAAEQFKFHMPDL