abcam

Product datasheet

Recombinant Human FTO protein ab109039

2 References

製品の詳細

製品名 Recombinant Human FTO protein

精製度 > 90 % SDS-PAGE.

ab109039 is 0.2µm filtered.

エンドトキシン・レベル < 1.000 Eu/μg

発現系 Escherichia coli

アクセッション番号 Q9C0B1

タンパク質長 Full length protein

Animal free No

由来 Recombinant

生物種 Human

配列 KRTPTAEERERAKKLRLLEELEDTWLPYLTPKDDEFYQQWQ

LKYPKLIL

REASSVSEELHKEVQEAFLTLHKHGCLFRDLVRIQGKDLLTP

VSRILIGN

PGCTYKYLNTRLFTVPWPVKGSNIKHTEAEIAAACETFLKLN

DYLQIETI

QALEELAAKEKANEDAVPLCMSADFPRVGMGSSYNGQDEVDI

KSRAAYNV

TLLNFMDPQKMPYLKEEPYFGMGKMAVSWHHDENLVDRSAVA

VYSYSCEG

PEEESEDDSHLEGRDPDIWHVGFKISWDIETPGLAIPLHQGD

CYFMLDDL

NATHQHCVLAGSQPRFSSTHRVAECSTGTLDYILQRCQLALQ

NVCDDVDN

DDVSLKSFEPAVLKQGEEIHNEVEFEWLRQFWFQGNRYRKCT

DWWCQPMA

 ${\tt QLEALWKKMEGVTNAVLHEVKREGLPVEQRNEILTAILASLT}$

ARQNLRRE

WHARCQSRIARTLPADQKPECRPYWEKDDASMPLPFDLTDIV

SELRGQLL EAKP

予測される分子量 65 kDa including tags

領域 2 to 505

タヴ His tag N-Terminus

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特性

Our Abpromise quarantee covers the use of ab109039 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション SDS-PAGE

製品の状態 Liquid

前処理および保存

保存方法および安定性 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 8.20

Constituents: 0.869% Tris HCI, 0.87% Sodium chloride

関連情報

機能 Dioxygenase that repairs alkylated DNA and RNA by oxidative demethylation. Has highest activity

towards single-stranded RNA containing 3-methyluracil, followed by single-stranded DNA containing 3-methylthymine. Has low demethylase activity towards single-stranded DNA

containing 1-methyladenine or 3-methylcytosine. Has no activity towards 1-methylguanine. Has no

detectable activity towards double-stranded DNA. Requires molecular oxygen, alphaketoglutarate and iron. Contributes to the regulation of the global metabolic rate, energy expenditure and energy homeostasis. Contributes to the regulation of body size and body fat

accumulation.

組織特異性 Ubiquitously expressed, with relatively high expression in adrenal glands and brain; especially in

hypothalamus and pituitary.

関連疾患 Defects in FTO are the cause of growth retardation developmental delay coarse facies and early

death (GRDDCFED) [MIM:612938]. The disease consists of a severe children multiple congenital anomaly syndrome with death by the age of 3 years. All affected individuals had postnatal growth retardation, microcephaly, severe psychomotor delay, functional brain deficits, and characteristic facial dysmorphism. In some patients, structural brain malformations, cardiac defects, genital

anomalies, and cleft palate were also observed.

配列類似性 Belongs to the fto family.

ドメイン The 3D-structure of the Fe2OG dioxygenase domain is similar to that of the Fe2OG dioxygenase

domain found in the bacterial DNA repair dioxygenase alkB and its mammalian orthologs, but sequence similarity is very low. As a consequence, the domain is not detected by protein

signature databases.

細胞内局在 Nucleus.

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