

Recombinant Human FTO protein ab109039

2 References

描述	
产品名称	重组人FTO蛋白
纯度	> 90 % SDS-PAGE. ab109039 is 0.2µm filtered.
内毒素水平	< 1.000 Eu/µg
表达系统	Escherichia coli
Accession	<u>Q9C0B1</u>
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Human
序列	KRTPTAEEREREAKKLRLLEELEDTWLPYLTPKDDEFYQQWQ LKYPKLIL REASSVSEELHKEVQEAFLLHKGCLFRDLVRIQGKDLLTP VSRILIGN PGCTYKYLNTRLFTVPWPVKGSNIKHTAEIAAACETFLKLN DYLQIETI QALEELAAKEKANEDAVPLCMSADFPRVGMGSSYNGQDEVDI KSRAAYNV TLLNFMDPQKMPYLKEEYPFGMGKMAVSWHHDENLVDRSAV VYSYSGE PEEESEDDSHLEGRDPDIWHVGFKISWDIETPLGLAIPLHQGD CYFMLDDL NATHQHCVLGASQPRFSSTHRVAECSTGTLDYILQRCQLALQ NVCDDVDN DDVSLKSFEPAVLKQGEEIHNEVEFEWLRQFWFQGNRYRKCT DWWCQPMA QLEALWKKMEGVTVNAVLHEVKREGLPVEQRNEILTAILASLT ARQNLRRE WHARCQSRIARTLPADQKPECRPYWEKDDASMPLPFDLTDIV SELRGQLL EAKP
预测分子量	65 kDa including tags
氨基酸	2 to 505
标签	His tag N-Terminus

## 技术指标

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Our **Abpromise guarantee** 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.

**应用** SDS-PAGE

**形式** Liquid

## 制备和贮存

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**稳定性和存储** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 8.20

Constituents: 0.869% Tris HCl, 0.87% Sodium chloride

## 常规信息

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**功能** 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, alpha-ketoglutarate 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.

**组织特异性** Ubiquitously expressed, with relatively high expression in adrenal glands and brain; especially in hypothalamus and pituitary.

**疾病相关** 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.

**序列相似性** Belongs to the fto family.

**结构域** 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.

**细胞定位** Nucleus.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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