abcam

Product datasheet

Recombinant Mouse FTO protein ab108958

概述

产品名称	**重组小鼠FTO蛋白**
蛋白长度	Full length protein

描述

性质	Recombinant
来源	Escherichia coli

氨基酸序列

Accession	Q8BGW1
种属	Mouse
分子量	55 kDa including tags
氨基酸	2 to 502
标签	His tag N-Terminus

技术指标

Our Abpromise guarantee covers the use of **ab108958** 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
内毒素水平	< 1.000 Eu/µg
纯度	> 90 % SDS-PAGE. ab108958 is urified using Ni-NTA column and FPLC and 0.2µm filtered.
形式	Liquid

制备和贮存

稳定性和存储	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. Preservative: None Constituents: 55mM Tris HCl, 150mM Sodium chloride, pH 8.2

常规信息

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.

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