

Product datasheet

Recombinant Human FTO protein ab109039

製品の概要

製品名	Recombinant Human FTO protein
タンパク質長	Full length protein

製品の詳細

由来	Recombinant
由来	Escherichia coli
アミノ酸配列	
アクセッション番号	Q9C0B1
生物種	Human
分子量	65 kDa including tags
領域	2 to 505
タグ	His tag N-Terminus

特性

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.

アプリケーション	SDS-PAGE
エンドトキシン・レベル	< 1.000 Eu/μg
精製度	> 90 % SDS-PAGE. ab109039 is 0.2μm filtered.
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. Preservative: None Constituents: 55mM Tris HCl, 150mM Sodium chloride, pH 8.2
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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, 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.
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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