重组人BMAL1蛋白

Recombinant BMAL1 protein (His tag)

目录号 Catalog Number	544031
同用名 Synonyms	Aryl hydrocarbon receptor nuclear translocator-like protein 1; Basic-helix-loop-helix-PAS protein MOP3; Brain and muscle ARNT-like 1; Class E basic helix-loop-helix protein 5; bHLHe5; Member of PAS protein 3; PAS domain-containing protein 3; bHLH-PAS protein JAP3
种属 Species	Human
表达系统 Expression System	E. coli
蛋白编号 Accession	O00327
分子量 Molecular Weight	Predictes a molecular mass of 24.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

产品信息

氨基酸序列 Amino Acid Sequence	MSKIKHHHHH HGGSGARRSF FCRMKCNRPS VKVEDKDFPS TCSKKKADRK SFCTIHSTGY LKSWPPTKMG LDEDNEPDNE GCNLSCLVAI GRLHSHVVPQ PVNGEIRVKS MEYVSRHAID GKFVFVDQRA TAILAYLPQE LLGTSCYEYF HQDDIGHLAE CHRQVLQTRE KITTNCYKFK IKDGSFITLR SRWFSFMNPW TKEVEYIVST NTVVLA
性状 Form	冻干粉末 Lyophilized powder
组分 Formulation	Lyophilized from sterile PBS, pH 7.4
纯度 Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
内毒素 Endotoxin	Not tested.
活性 Activity	Not tested.
稳定性 Stability	Samples are stable for up to twelve months from date of receipt at -70℃
蛋白构建 Protein Construction	DNA encoding 242-443 aa (O00327) were fused with N-terminal 6His tag.

保存与运输

复溶 Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
储存 Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
运输 Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

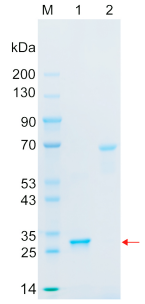
功能描述

研究背景 Background

Recombinant BMAL1 (242-443) Fragment: A high-purity, functional protein fragment encompassing the PAS 2 domain of the human Basic helix-loop-helix ARNT-like protein 1 (BMAL1). This product is an essential tool for investigating circadian clock mechanisms, transcriptional regulation, and domain-specific interactions in circadian biology research.
BMAL1 is a core transcriptional activator of the circadian clock, forming heterodimers with CLOCK or NPAS2 to drive rhythmic gene expression by binding E-box promoter elements. It regulates diverse physiological processes, including metabolism, immune function, neurogenesis, and hormone signaling, through the transcription/translation feedback loop. The full-length protein localizes to the nucleus and cytoplasm, with nucleocytoplasmic shuttling critical for its function. This recombinant fragment (residues 242-443) contains the PAS 2 domain, enabling focused studies on dimerization, ligand binding, and structural aspects of circadian regulation without interf

验证数据

SDS-PAGE



Recombinant BMAL1 protein (His tag) SDS-PAGE
M: Marker; Lane 1: BMAL1; Lane 2: BSA