# abcam

### Product datasheet

## Recombinant Human beta Tubulin protein ab70187

3 References 画像数 2

製品の詳細

製品名 Recombinant Human beta Tubulin protein

精製度 > 70 % Densitometry.

Purity is lot specific. Please contact our technical Support team for details.

**発現系** Escherichia coli

アクセッション番号 <u>P07437</u>

タンパク質長 Full length protein

Animal free No

**由来** Recombinant

生物種 Human

予測される分子量 76 kDa including tags

**領域** 1 to 444

タグ GST tag N-Terminus

特性

Our Abpromise guarantee covers the use of ab70187 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 Western blot

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 on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.002% PMSF, 0.004% DTT, 0.79% Tris HCI, 25% Glycerol (glycerin, glycerine),

0.88% Sodium chloride, 0.31% Glutathione, 0.003% EDTA

関連情報

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機能 Tubulin is the major constituent of microtubules. It binds two moles of GTP, one at an

exchangeable site on the beta chain and one at a non-exchangeable site on the alpha chain.

組織特異性 Ubiquitously expressed with highest levels in spleen, thymus and immature brain.

関連疾患 Cortical dysplasia, complex, with other brain malformations 6

Skin creases, congenital symmetric circumferential, 1

**配列類似性** Belongs to the tubulin family.

ドメイン The highly acidic C-terminal region may bind cations such as calcium.

翻訳後修飾 Some glutamate residues at the C-terminus are polyglutamylated, resulting in polyglutamate

chains on the gamma-carboxyl group (PubMed:26875866). Polyglutamylation plays a key role in microtubule severing by spastin (SPAST). SPAST preferentially recognizes and acts on microtubules decorated with short polyglutamate tails: severing activity by SPAST increases as the number of glutamates per tubulin rises from one to eight, but decreases beyond this

glutamylation threshold (PubMed:26875866).

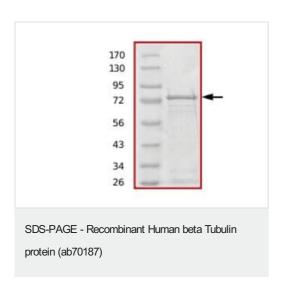
Some glutamate residues at the C-terminus are monoglycylated but not polyglycylated due to the absence of functional TTLL10 in human. Monoglycylation is mainly limited to tubulin incorporated into axonemes (cilia and flagella). Both polyglutamylation and monoglycylation can coexist on the same protein on adjacent residues, and lowering glycylation levels increases polyglutamylation, and reciprocally. The precise function of monoglycylation is still unclear.

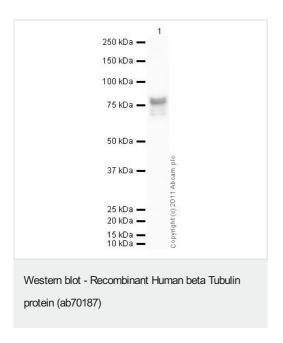
Phosphorylated on Ser-172 by CDK1 during the cell cycle, from metaphase to telophase, but not

in interphase. This phosphorylation inhibits tubulin incorporation into microtubules.

**細胞内局在** Cytoplasm, cytoskeleton.

#### 画像





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