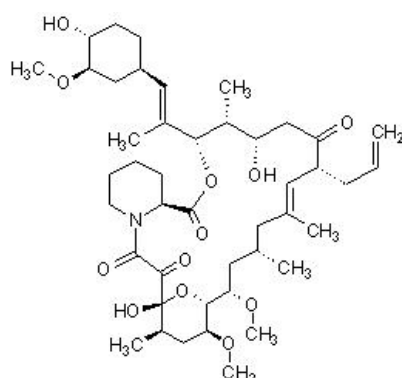


FK506 (Tacrolimus), Immunosuppressant ab120223

[10 References](#) [2 Images](#)

Overview

| | |
|-------------------------------|---|
| Product name | FK506 (Tacrolimus), Immunosuppressant |
| Description | Immunosuppressant |
| Biological description | Immunosuppressant. Complexes with FKBP-12 to inhibit calcineurin. |
| CAS Number | 104987-11-3 |
| Chemical structure | |



Properties

| | |
|-----------------------------|--|
| Chemical name | (3 <i>S</i> ,4 <i>R</i> ,5 <i>S</i> ,8 <i>R</i> ,9 <i>E</i> ,12 <i>S</i> ,14 <i>S</i> ,15 <i>R</i> ,16 <i>S</i> ,18 <i>R</i> ,19 <i>R</i> ,26 <i>aS</i>)-5,6,8,11,12,13,14,15,16,17,18,19,24,25,26,26 <i>a</i> -Hexadecahydro-5,19-dihydroxy-3-[(1 <i>E</i>)-2-[(1 <i>R</i> ,3 <i>R</i> ,4 <i>R</i>)-4-hydroxy-3-methoxycyclohexyl]-1-methylethenyl]-14,16-dimethoxy-4,10,12,18-tetramethyl-8-(2-propen-1-yl)-15,19-epoxy-3 <i>H</i> -pyrido[2,1- <i>c</i>][1,4]oxaazacyclotricosine-1,7,20,21(4 <i>H</i> ,23 <i>H</i>)-tetrone |
| Molecular weight | 804.02 |
| Molecular formula | C ₄₄ H ₆₉ NO ₁₂ |
| PubChem identifier | 445643 |
| Storage instructions | Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months. |
| Solubility overview | Soluble in DMSO to 100 mM |
| Handling | Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and |

prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Toxic, refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our [frequently asked questions \(FAQ\) page](#) for more details.

SMILES

```
O[C@@H]1CC[C@H](C[C@H]1OC)C=C(/C)[C@H]2OC(=O)[C@@H]4CCCCN4C(=O)C(=O)
[C@]3(O)O[C@H]([C@H](C[C@@H](C)CC(C)=C[C@@H](CC=C)C(=O)C[C@H](O)
[C@H]2C)OC)[C@H](C[C@H]3C)OC
```

Source

Streptomyces tsukubaensis

Applications

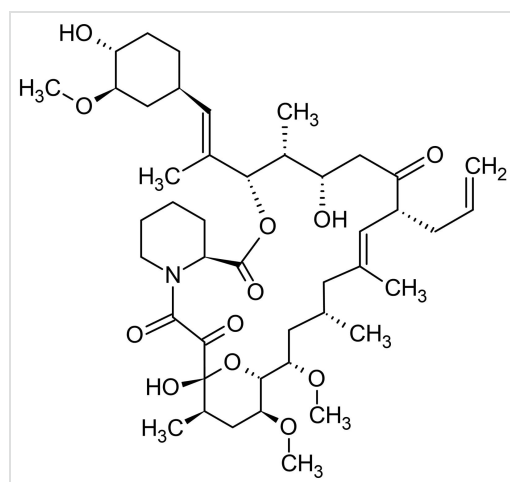
The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab120223 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

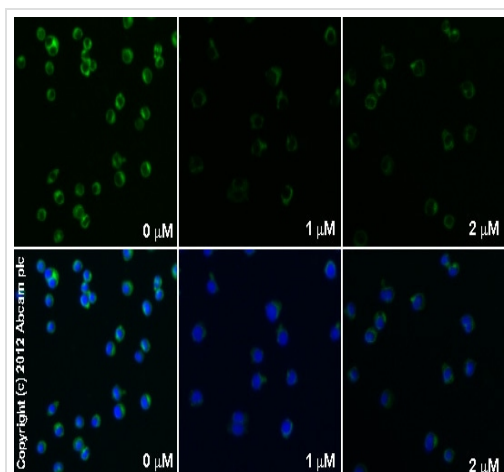
| Application | Abreviews | Notes |
|--------------------|-----------|--|
| Functional Studies | | Use at an assay dependent concentration. |

Images



2D chemical structure image of ab120223, FK506 (Tacrolimus),
Immunosuppressant

Chemical Structure - FK506 (Tacrolimus),
Immunosuppressant (ab120223)



Immunocytochemistry/ Immunofluorescence -
FK506 (Tacrolimus), Immunosuppressant
(ab120223)

ab32518 staining IkBα/β in RAW 264.7 cells treated with FK506 (ab120223), by ICC/IF. Decrease in IkBα/β expression correlates with increased concentration of FK506, as described in literature.

The cells were incubated at 37°C for 3h in media containing different concentrations of ab120223 (FK506) in DMSO, fixed with 100% methanol for 5 minutes at -20°C and blocked with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 2h at room temperature. Staining of the treated cells with **ab32518** (1/100 dilution) was performed overnight at 4°C in PBS containing 1% BSA and 0.1% tween. A DyLight 488 goat anti-rabbit polyclonal antibody (**ab96899**) at 1/250 dilution was used as the secondary antibody. Nuclei were counterstained with DAPI and are shown in blue.

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

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