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Synthesis of novel proxyphylline derivatives with dual Anti-*Candida albicans* and anticancer activity

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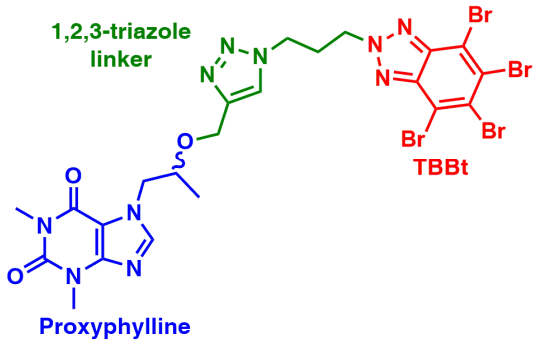
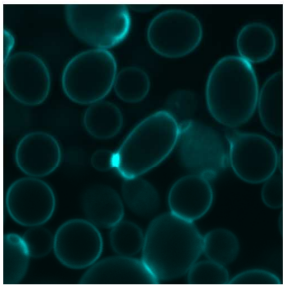
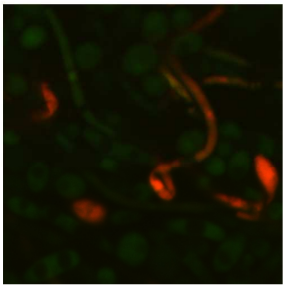
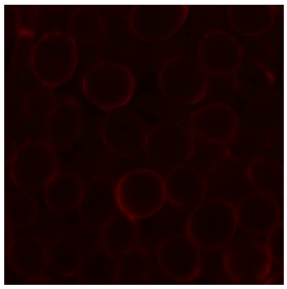
<table>
<tr><th colspan="2">Dual Anticancer-Antifungal Agent</th><th>CCRF-CEM*</th><th>Non-toxic in vitro</th></tr>
<tr><td colspan="2"> 
</td><td>EC_{50} = 6.5 μM</td><td>IC_{50} >280 μM
(normal mammalian
Vero cell line)</td></tr>
<tr><td colspan="2"></td><td>C. albicans**</td><td>Non-toxic in vivo</td></tr>
<tr><td colspan="2"></td><td>MIC = 5 μM</td><td>Non-toxic against
Galleria mellonella</td></tr>
<tr><th colspan="4">Selectively Cidal Proxyphylline Derivatives</th></tr>
<tr><th>Chitin</th><th>Biofilm apoptotic cell death</th><th colspan="2">β-glucan</th></tr>
<tr><td> 
SI = 550±43 μM</td><td> 
Mitochondrial demage
IC_{50} = 20–248 μM</td><td colspan="2"> 
Host immune
defense's stimulation</td></tr>
</table>

* Human acute lymphoblastic leukemia cell line; ** ATCC 90028 reference yeast strain from American Type Culture Collection.