





1 2

*Laurencia.*

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~~Ala~~ EÇ

J q y c t f. "D0" O0="Hgpkecn." Y0" *Tetrahedron Lett.* **1976**, 17, 473; 647420

I w g n c. " I 0=" " | v w p ±. "C0=" O c p e k p k. "K0=" R k g v t c. "H0" *Tetrahedron Lett.* **1997**, 38, :4836:4860

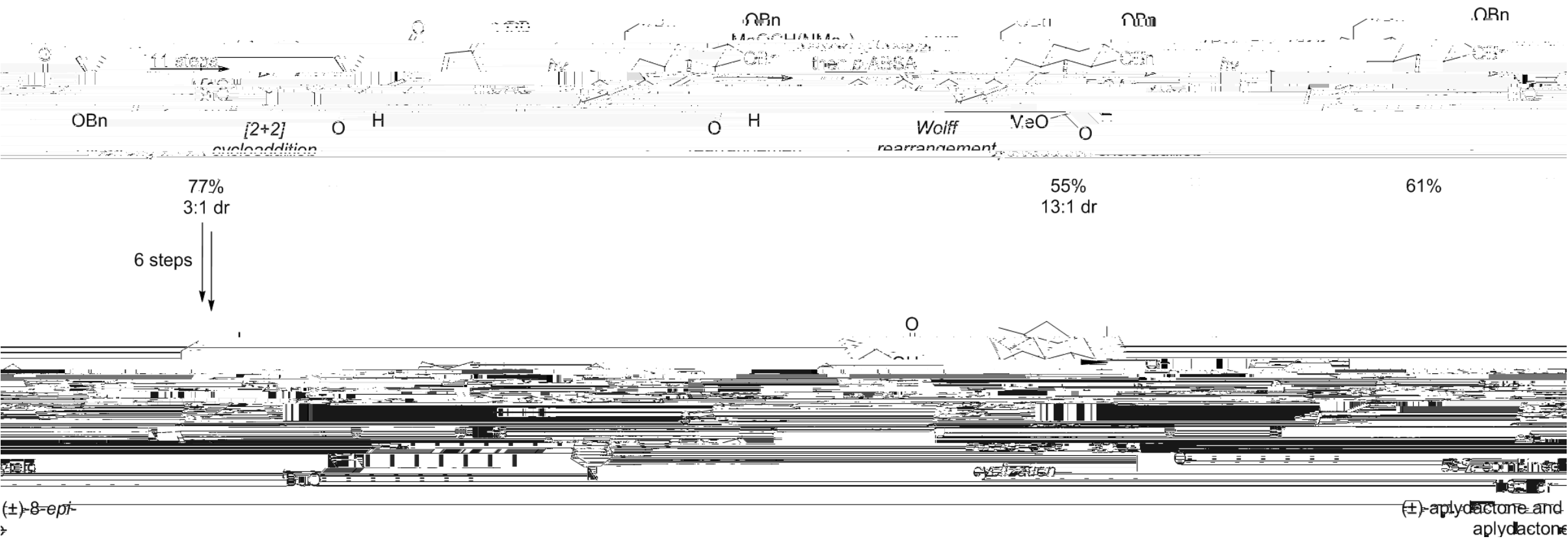
H g f q t q x. "U0" P0="T g u j g v p { c m. " O 0" X0="U e j g f t k p. "C0" R0="K n { k p. "U0" I 0="U v t w e j m q x. " [ 0" V0="U v q p k m. "X0" C0="G n { c m q x. " I 0" D0" " " " " " " *Dokl. Akad. Nauk. SSSR* **1989**, 305, :996:9;0

H g f q t q x. "U0" P0="T c f e j g p m q. "Q0" U0="U j w d k p c. "N0" M0="M c n k p q x u m { . "C0" K0=" I g t c u k o g p m q. "C0" X0="R q r q x. " F0" [ 0="U v q p k m. "X0" " " " " " " *J. Am. Chem. Soc.* **2001**, 123, 72667270

H g f q t q x. "U0" P0="U j w d k p c. "N0" M0="D q f g. "C0" O0="U v q p k m. "X0" C0" *Cancer Res.* **2007**, 67, 7;3667;420



# Rtgxkqwu"U { pv j gugu



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*Angew. Chem. Int. Ed.*

Tgvtqu { p v j guku

# Hqt y ctf"U { p v j guku

*t*

PDU"?N/dtq o quweekpk o kfg

W o dtgkv."O0"C0="Ujctrnguu."M0"D0"*J. Am. Chem. Soc.* **1977**, 99, 774867774:0

J w."F0"Z0="Ugkfn."H0"L0="Dwejgt."E0="Dwtpu."P0"\0"*J. Am. Chem. Soc.* **2015**, 137, 59;7659;:0

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10

12

FDW"?3.: / fkc | cdke { enq ] 70602\_wpfge / 9 / gpg0

Ectnugp."R0" J 0"L0="Mcvuwmk."V0=" Octvkp."X0"U0="Ujctrnguu."M0"D0"J. Org. Chem. **1981**, 46, 5;5865;5:0

Dwtemng."C0"L0="Xcukngx."X0" J 0="Dwtpu."P0" \ 0"Angew. Chem. Int. Ed. **2016**, 55, 3369863369;0



Hqt y ctf"U{pvjgu

# Hqt y ctf"U { p v j guku

KDZ"?"4/kqfqz { dgp | qke"cekf

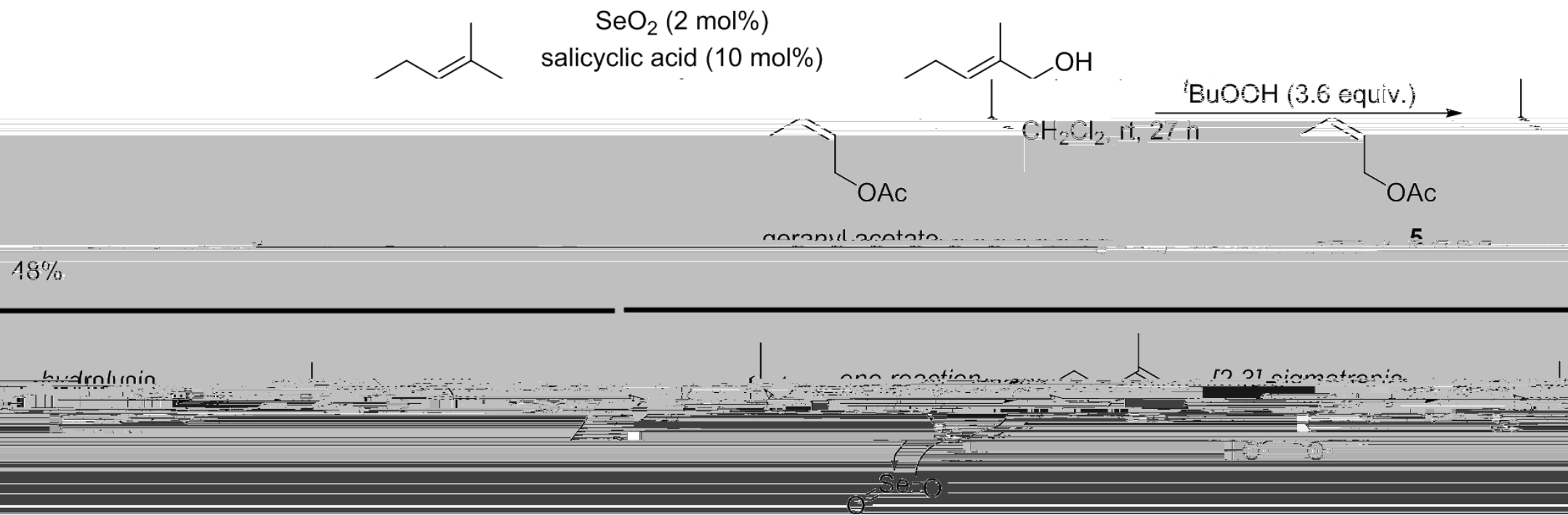
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Uw o o ct{

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# Oge j cpku o u< Tknng { "UgQ4"Qzkfcvkqp



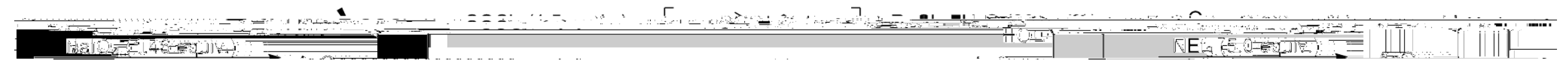
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Jgvgtqfkjcnqigpcvkqp

# Oge j cpku o u<

## Uqn x qn { uku / Cuuku v g f " E { enk | cvk q p



Ogejcpkuou<  
Fgj { ftcvkqp"cpf"Qzkfcvkqp



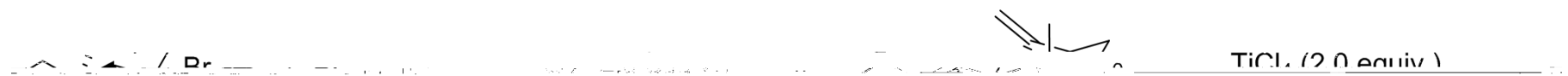
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# Oge j cpku o u<

## O i<sup>21</sup>VkEn<sub>6</sub>lE J<sub>4</sub>En<sub>4</sub>" Ogv j gp {ncvkqp



Cngcpftk."N0"G0="Dqi fcpqzk ."D0=" I ckfkgu."C0="Lqpgu."F0"L0="Nkcq."U0="Okejcnqyke |."C0="Tq|k<sup>3</sup>tg."L0="Uejqvw."C0"J.

*Organomet. Chem.* **1993**, 459, :96;50

[cp."V0/ J0="Vuck."E0/E0="Ejkgp."E0/V0="Ejq."E0/E0=" Jwcpj."R0/E0" *Org. Lett.* **2004**, 6, 6;8366;850

Ogejcpkuou<  
]4-4\_"Rjqvqe{enqcfkv