Supporting Information II

Tandem Cyclization of Alkynes via Rhodium Alkynyl and Alkenylidene Catalysis

NMR Spectra

Jung Min Joo, Yu Yuan and Chulbom Lee*

Department of Chemistry, Princeton University

Princeton, New Jersey 08544

yy-XV-89

Pulse Sequence: s2pul

9

yy-XV-89 carbon

Pulse Sequence: s2pul

yy-XV-90 carbon
Pulse Sequence: s2pul

yy-XIII-51
Pulse Sequence: s2pul

yy-XIII-51 carbon
Pulse Sequence: s2pul

yy-XIII-54

Pulse Sequence: s2pul

12

yy-XIII-54 carbon

Pulse Sequence: s2pul

14

yy-XIV-84

Pulse Sequence: s2pul

yy-XIV-84 carbon

Pulse Sequence: s2pul

21

yy-XV-85
Pulse Sequence: s2pul

yy-XV-85 carbon
Pulse Sequence: s2pul