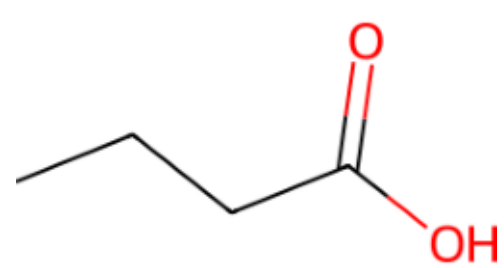
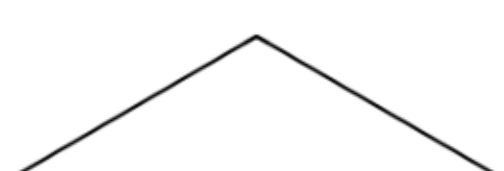


Rank 1  
Atomic Economy 100.0%  
Pathway by-product 0

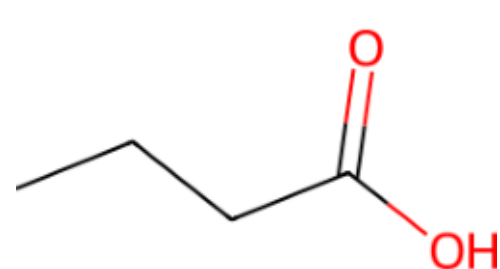


-CARBON-DIOXIDE

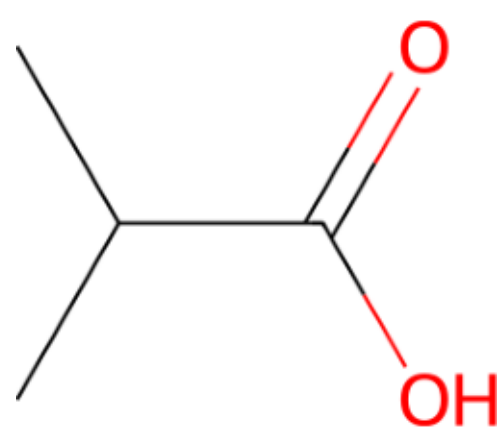
rule0024\_52



Rank 2  
Atomic Economy 100.0%  
Pathway by-product 0

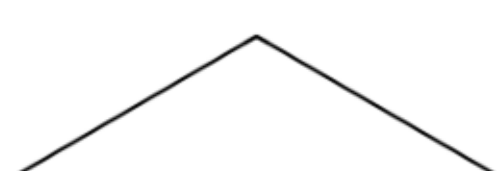


rule0028\_50

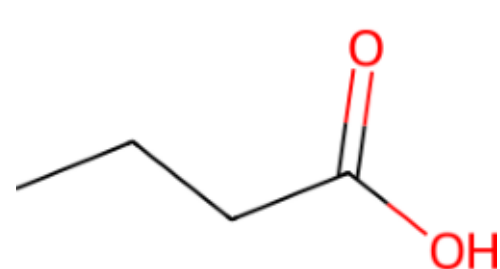


-CARBON-DIOXIDE

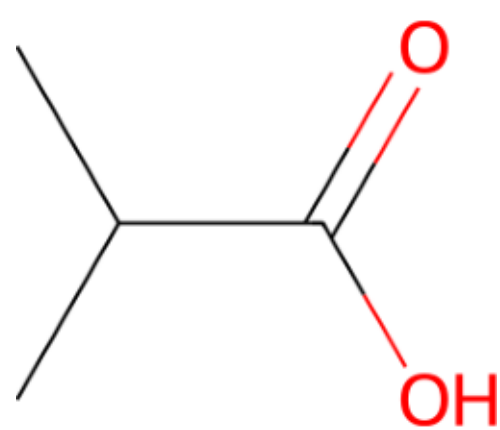
rule0024\_49



Rank 3  
Atomic Economy 100.0%  
Pathway by-product 0

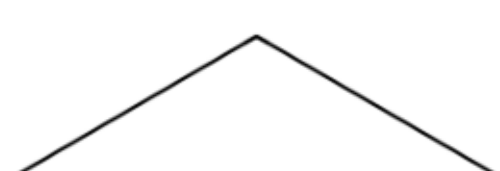


rule0028\_46

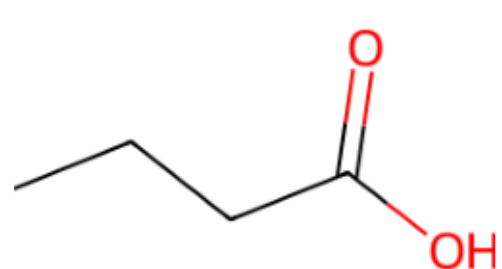


-CARBON-DIOXIDE

rule0024\_49

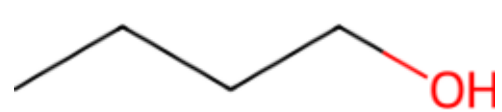


Rank 4  
Atomic Economy 59.5%  
Pathway by-product 0

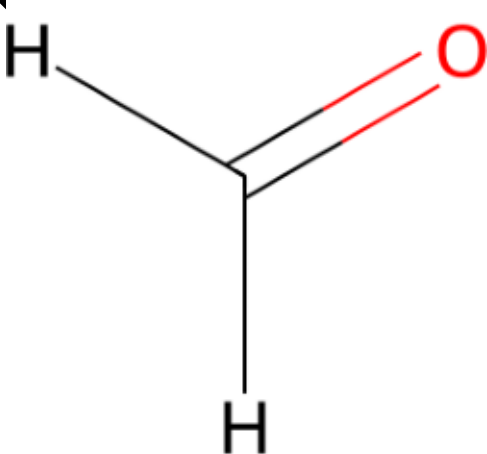
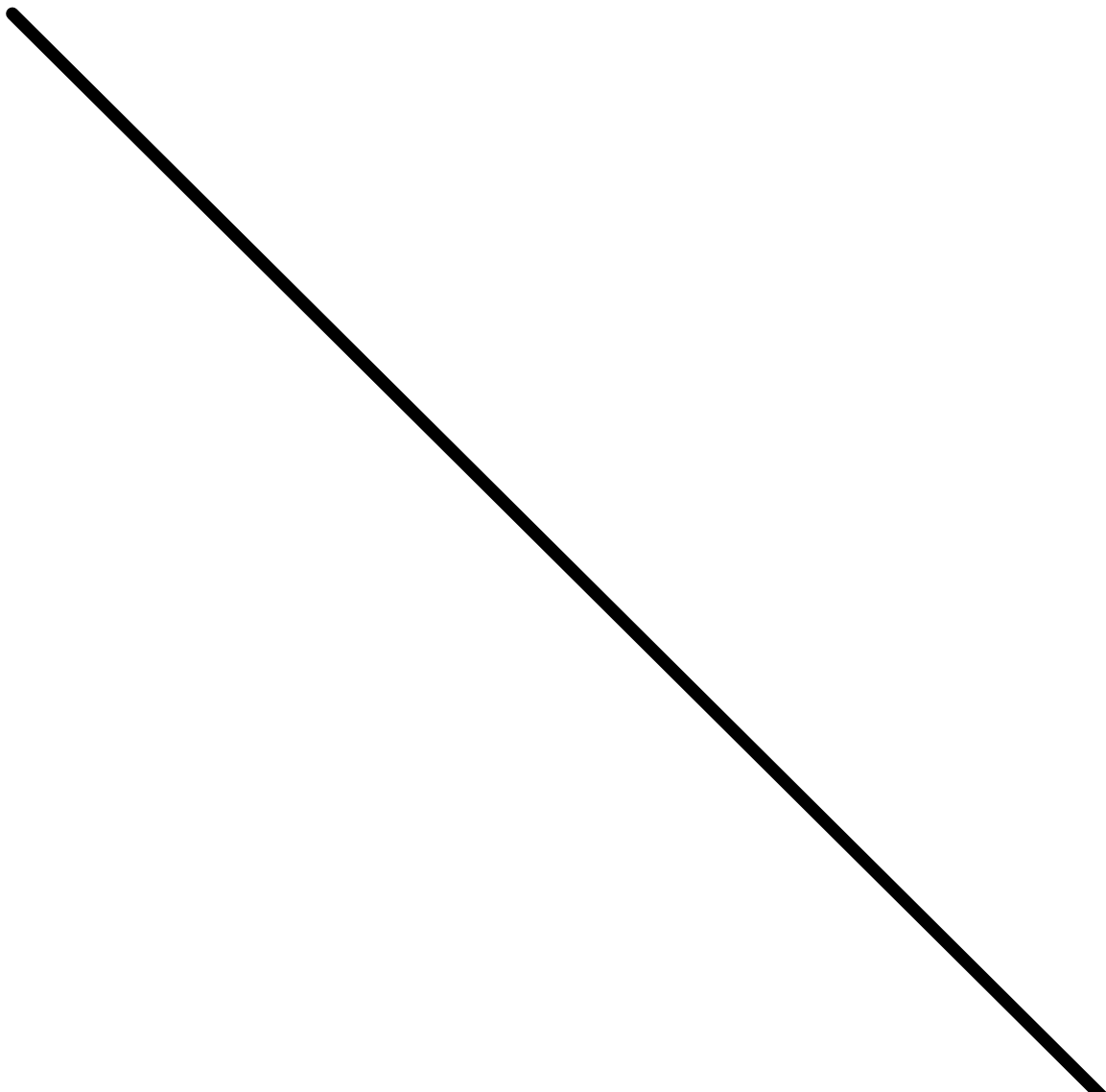
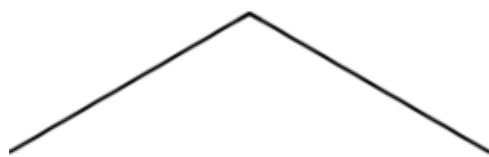
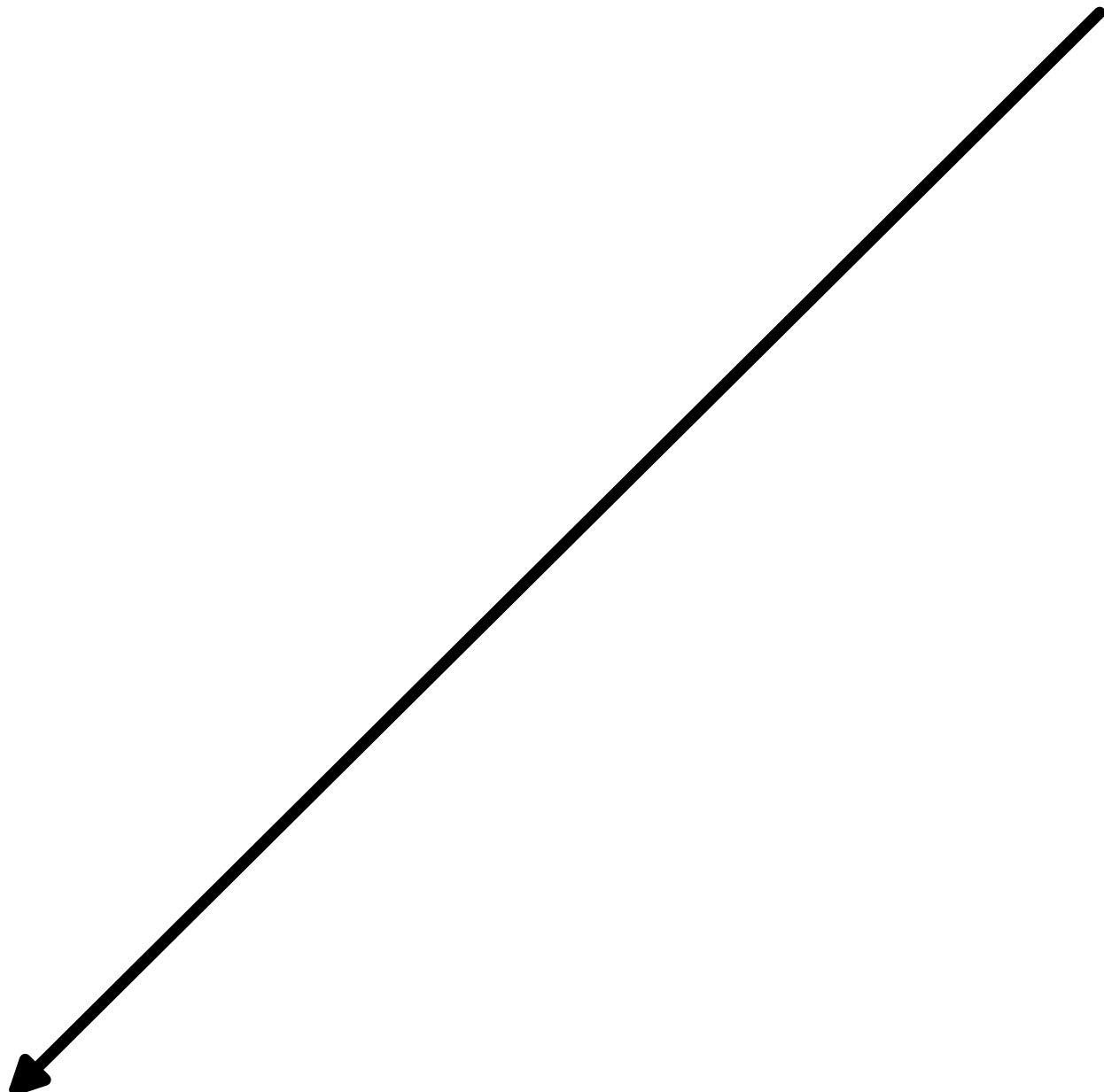


+NADPH +NADPH -NADP -NADP -WATER

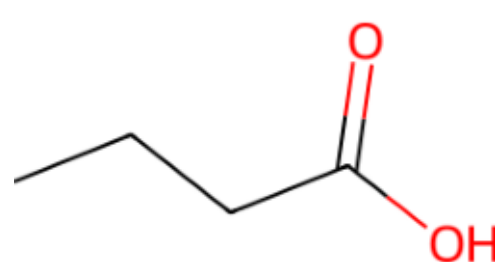
rule0164\_2



rule0053\_20

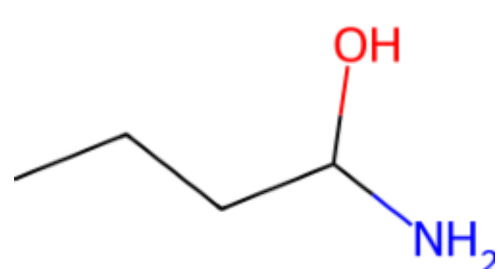


Rank 5  
Atomic Economy 49.5%  
Pathway by-product 0

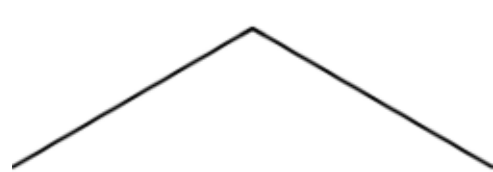
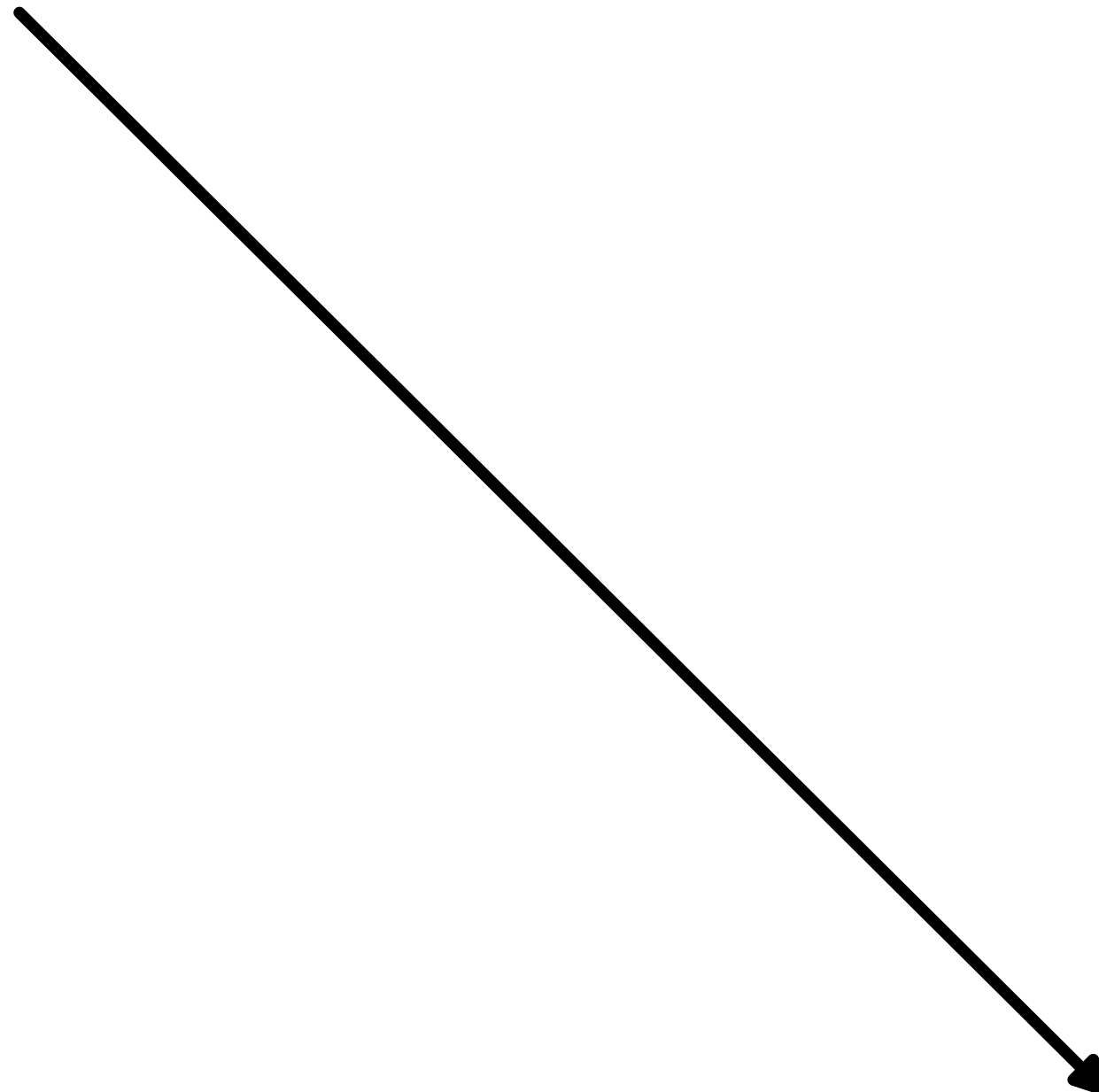
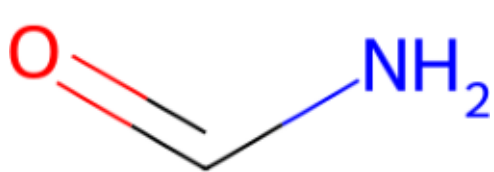
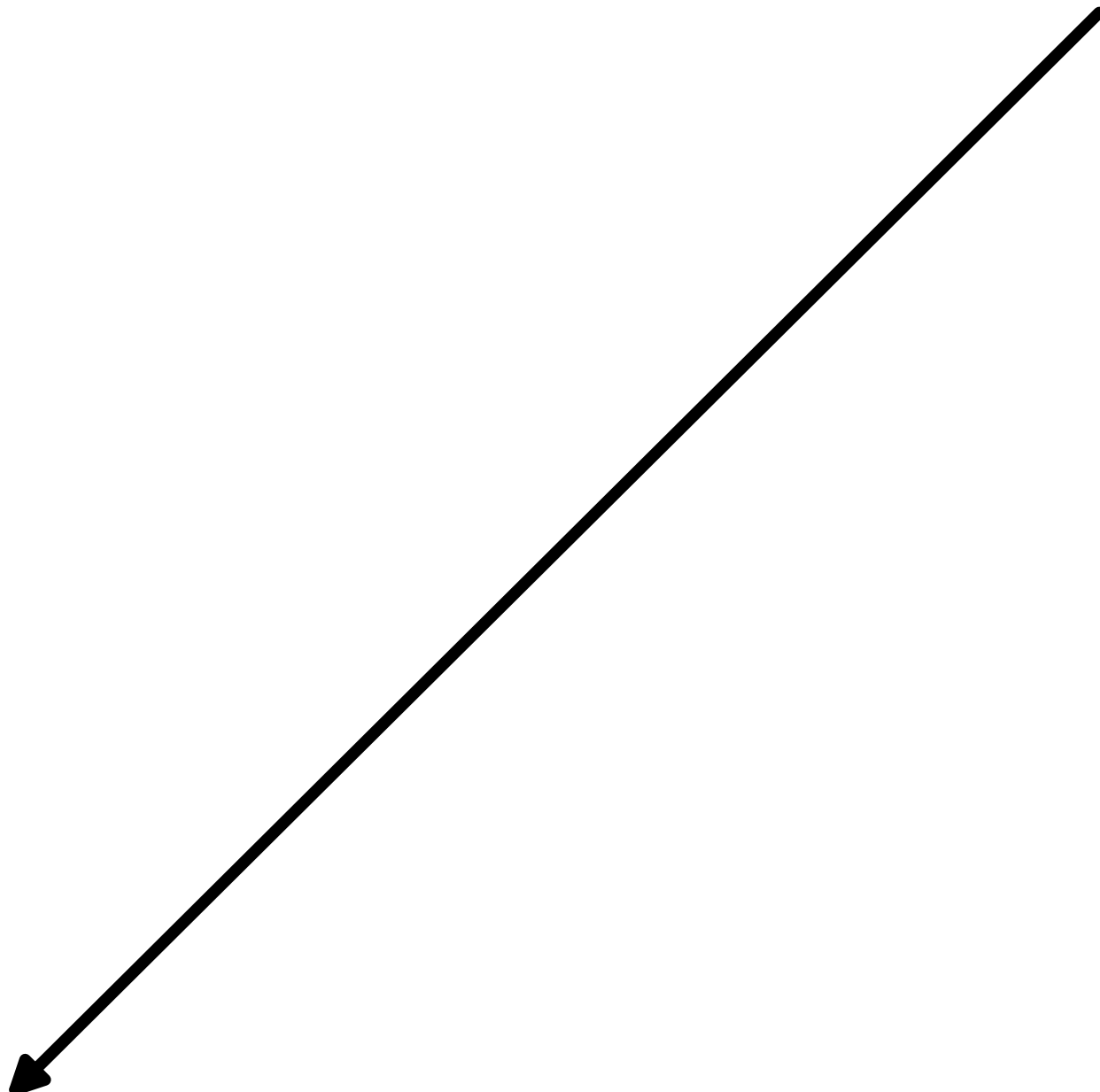


+AMMONIA +HYDROGEN-PEROXIDE -WATER -O2

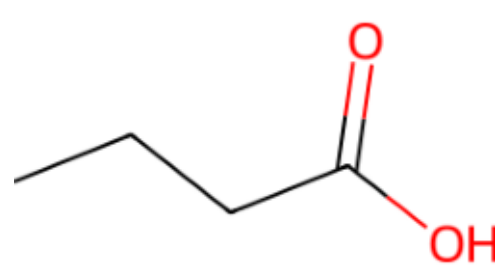
rule0091\_12



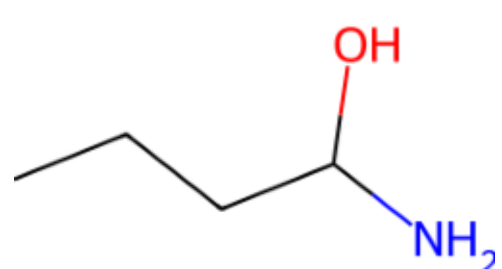
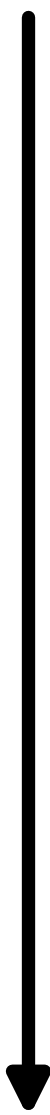
rule0053\_20



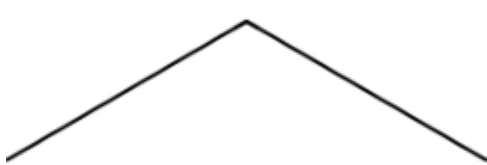
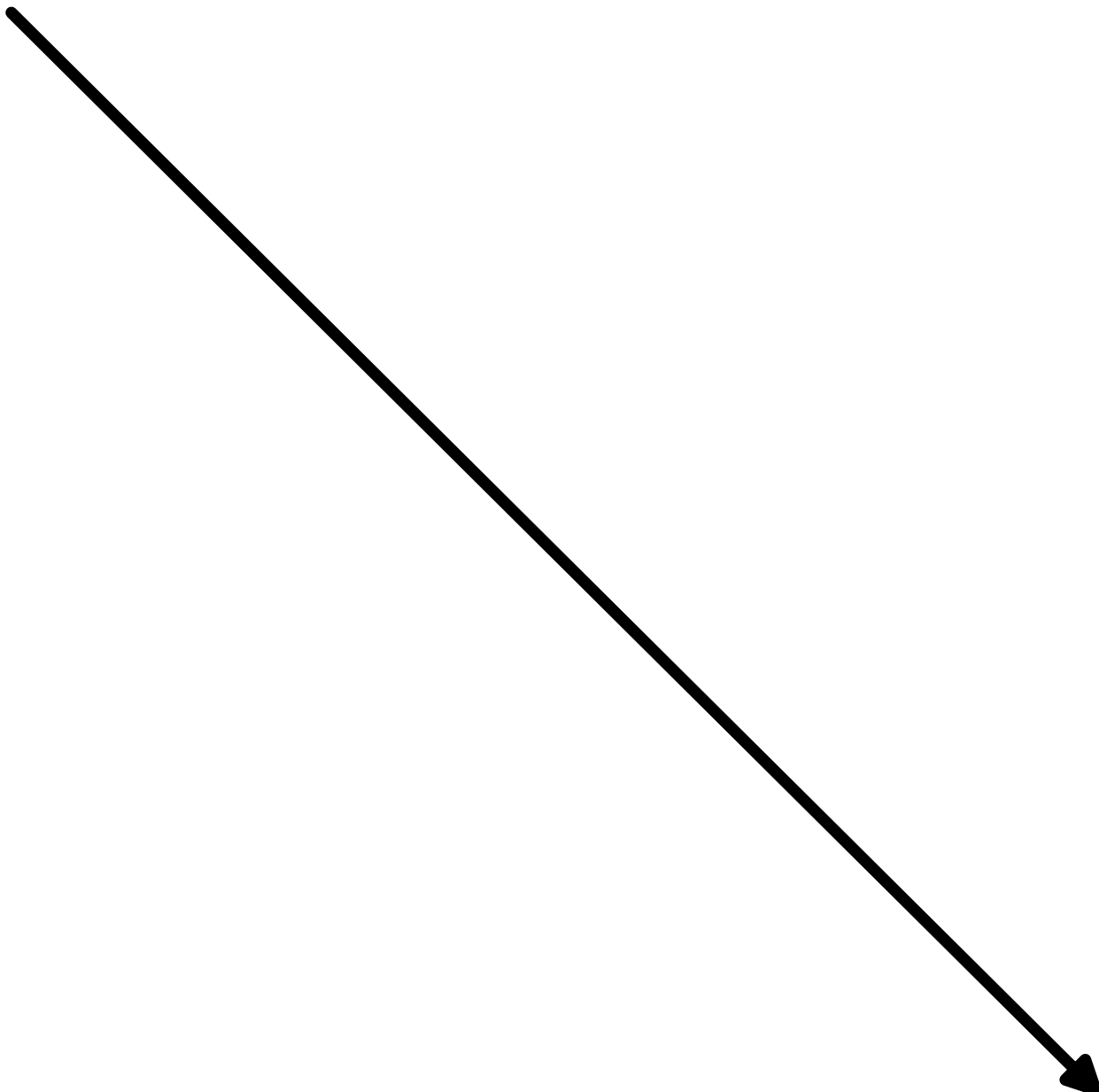
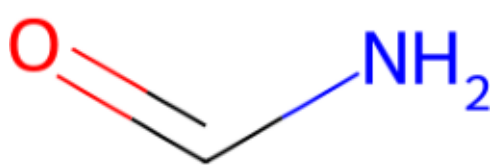
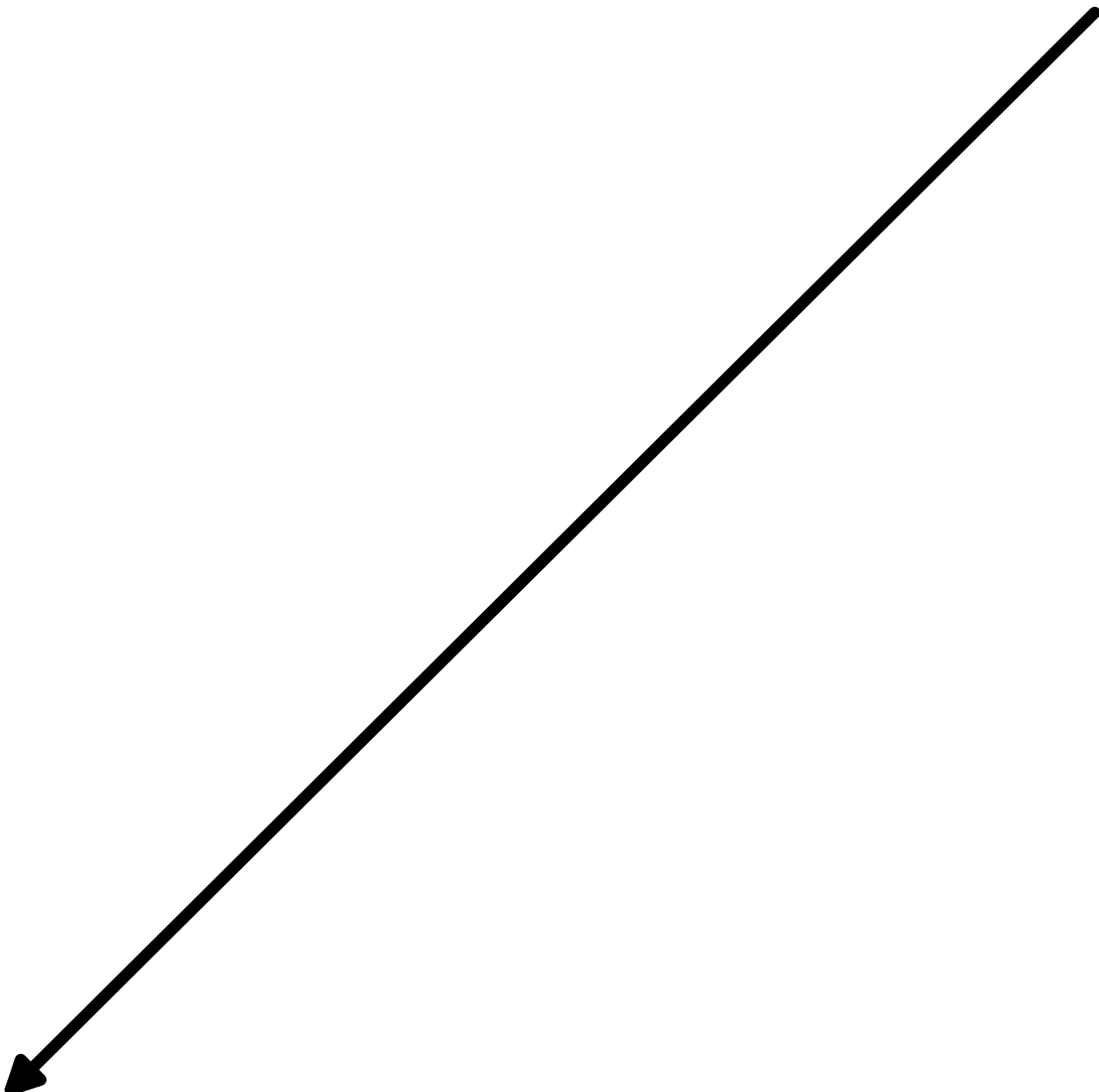
Rank 6  
Atomic Economy 49.5%  
Pathway by-product 0



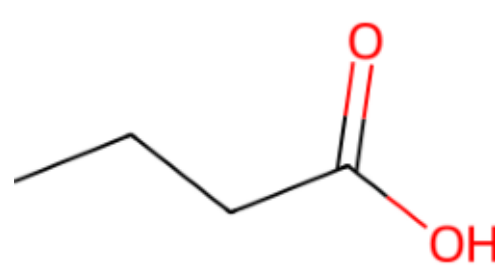
+AMMONIA +NADPH -NADP -WATER  
rule0166\_2



rule0053\_20

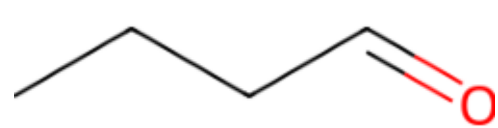


Rank 7  
Atomic Economy 48.9%  
Pathway by-product 0



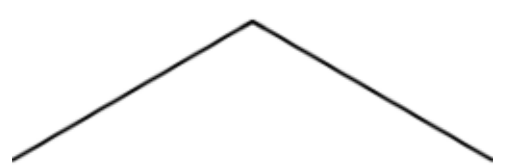
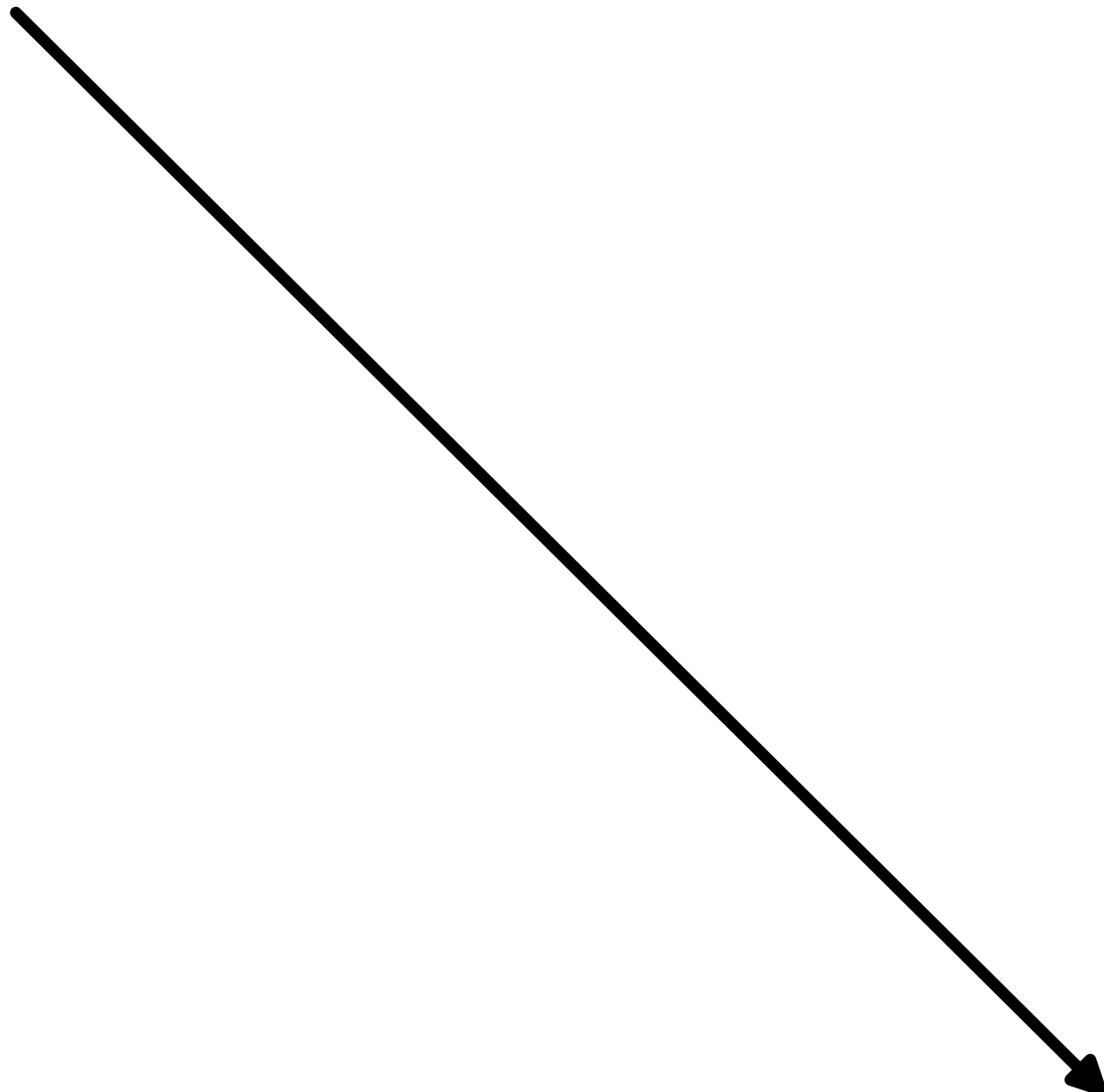
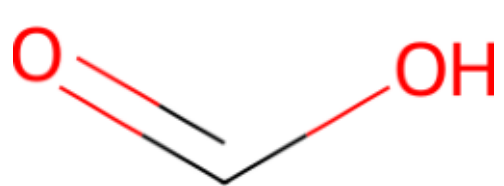
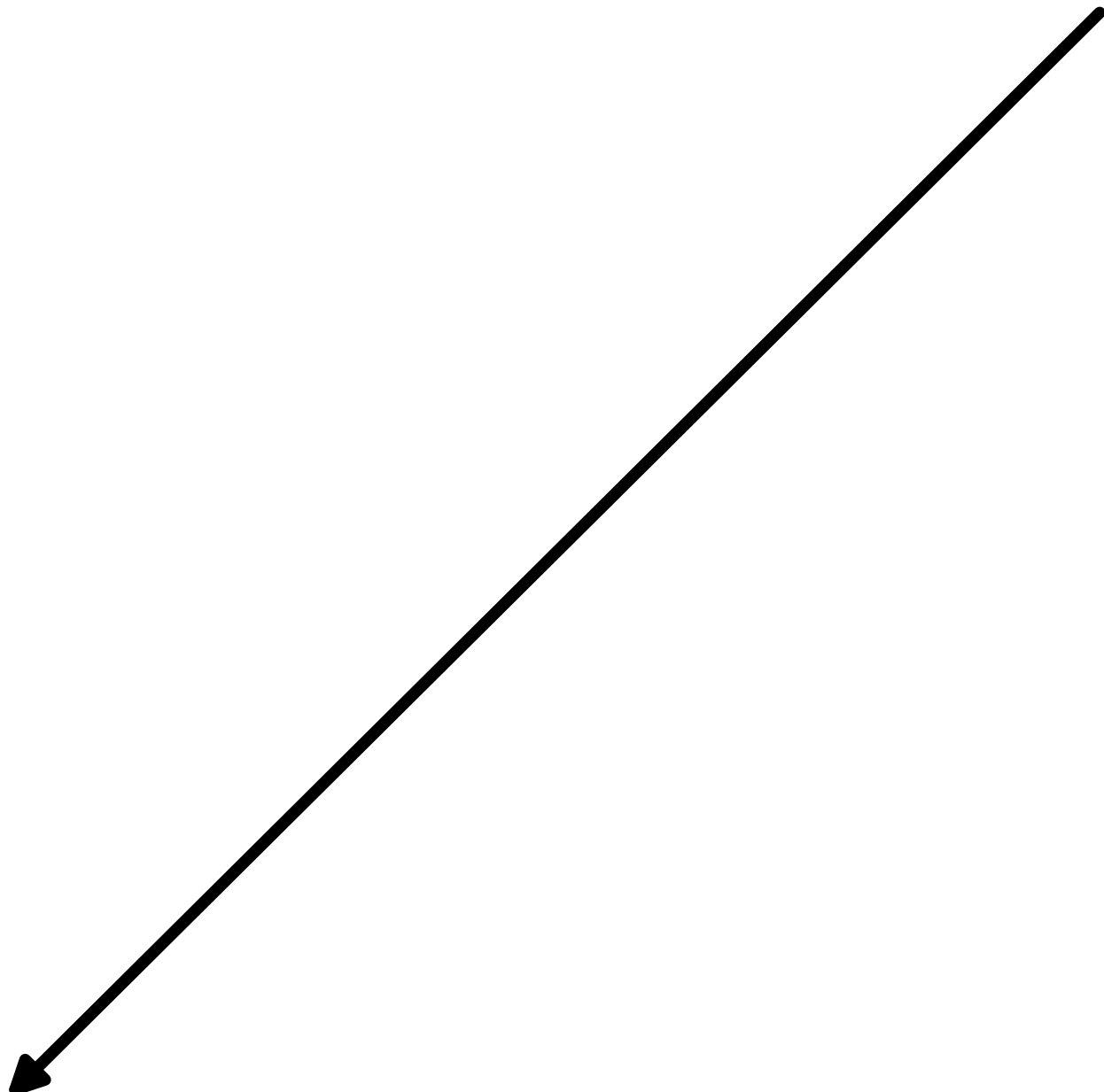
+HYDROGEN-PEROXIDE -WATER -O2

rule0147\_2

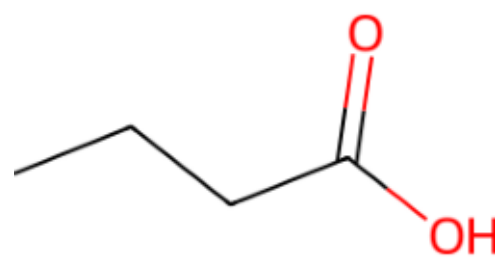


+WATER

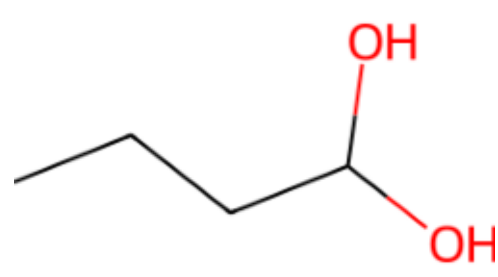
rule0085\_2



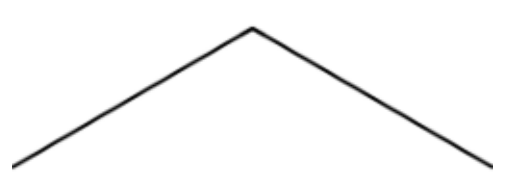
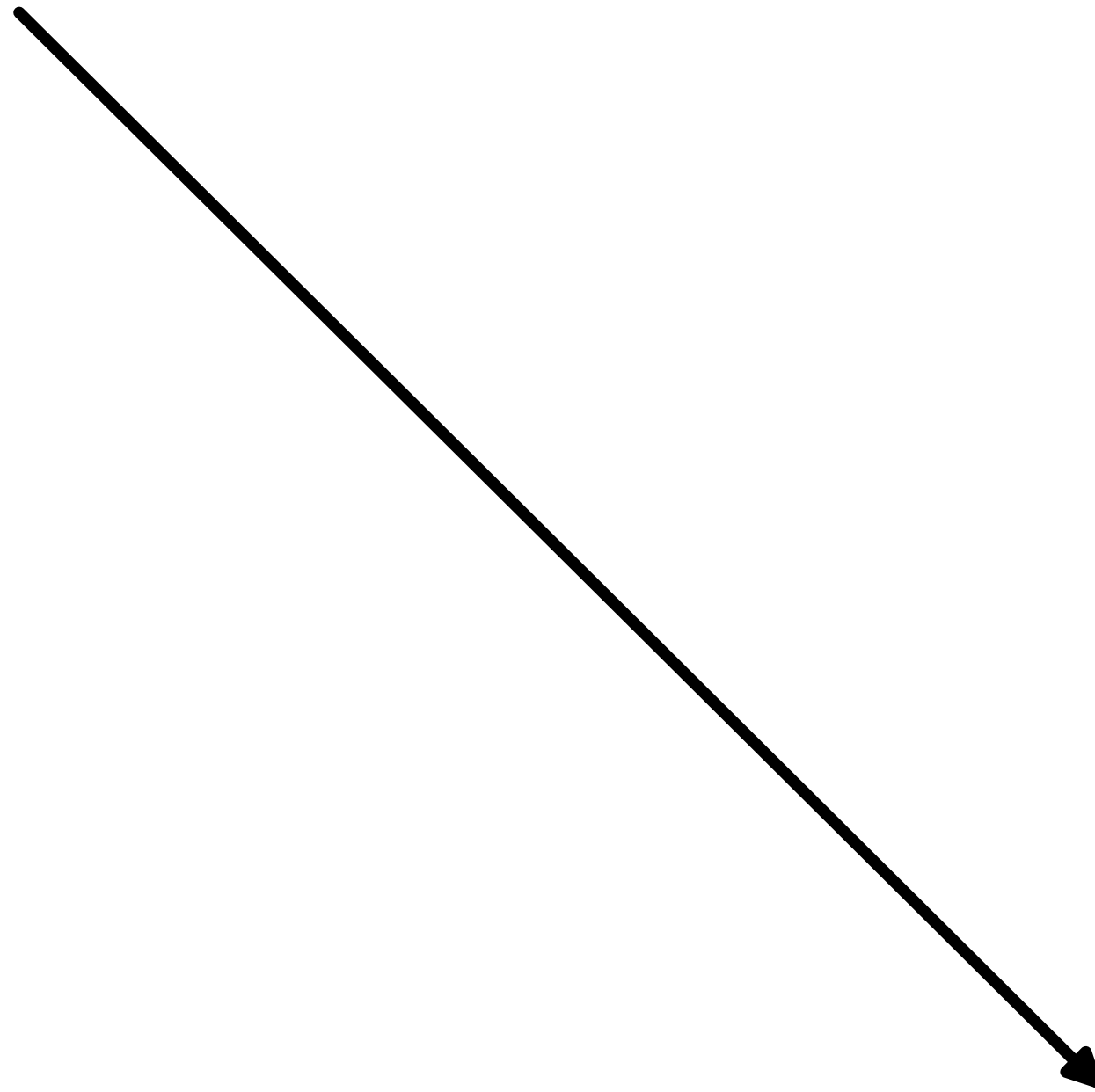
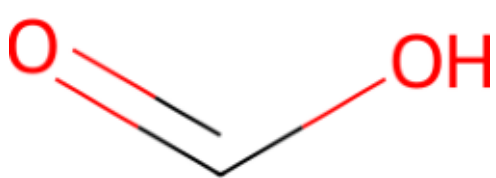
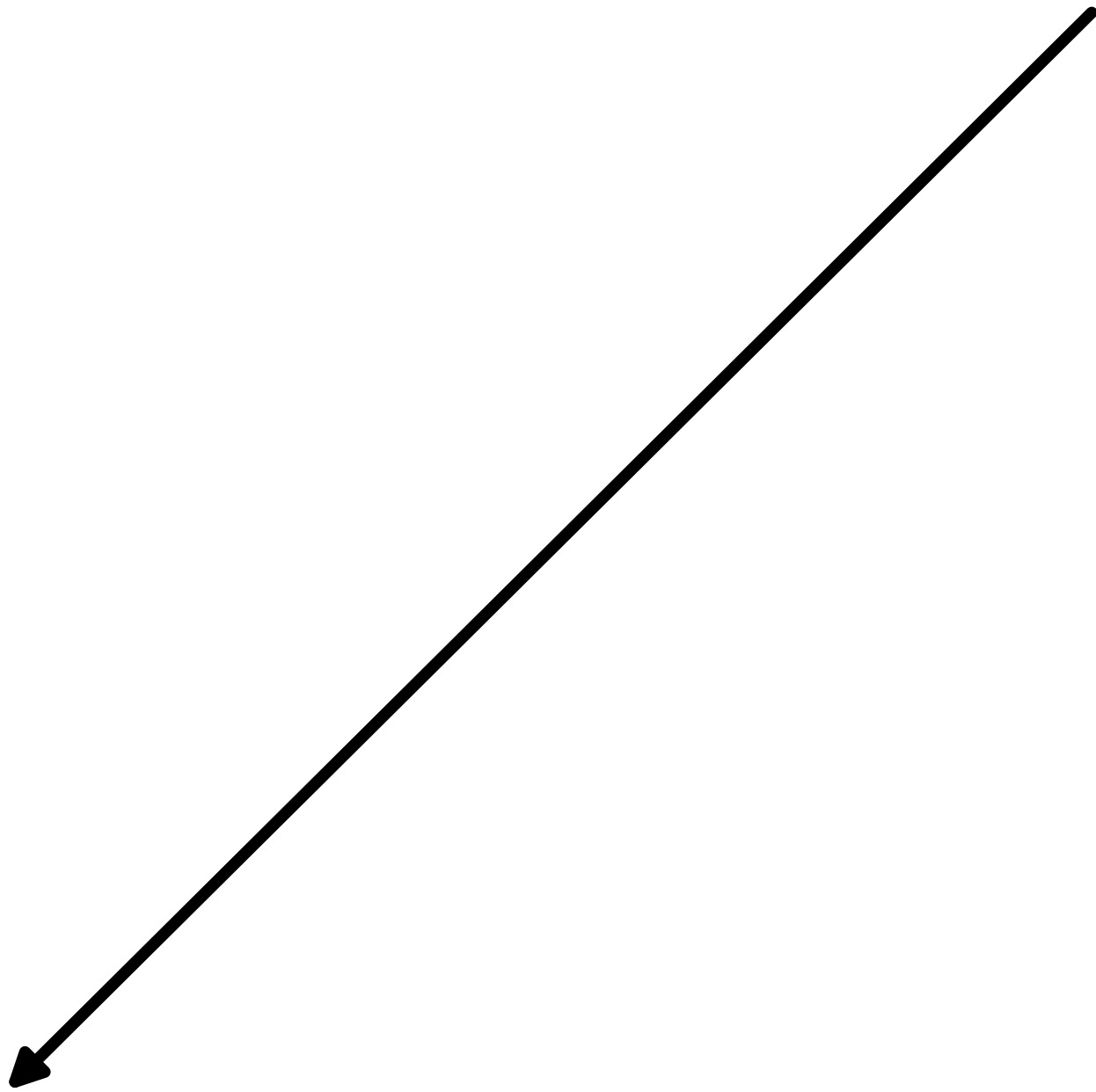
Rank 8  
Atomic Economy 48.9%  
Pathway by-product 0



+HYDROGEN-PEROXIDE -O2  
rule0078\_14

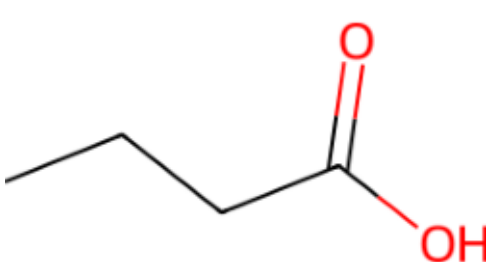


rule0053\_20

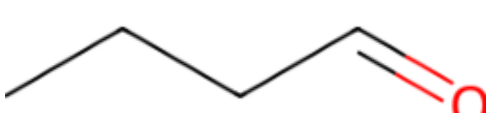




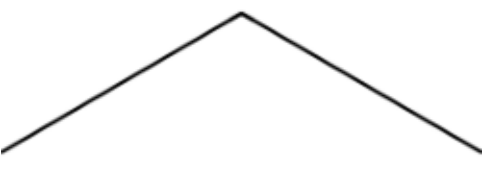
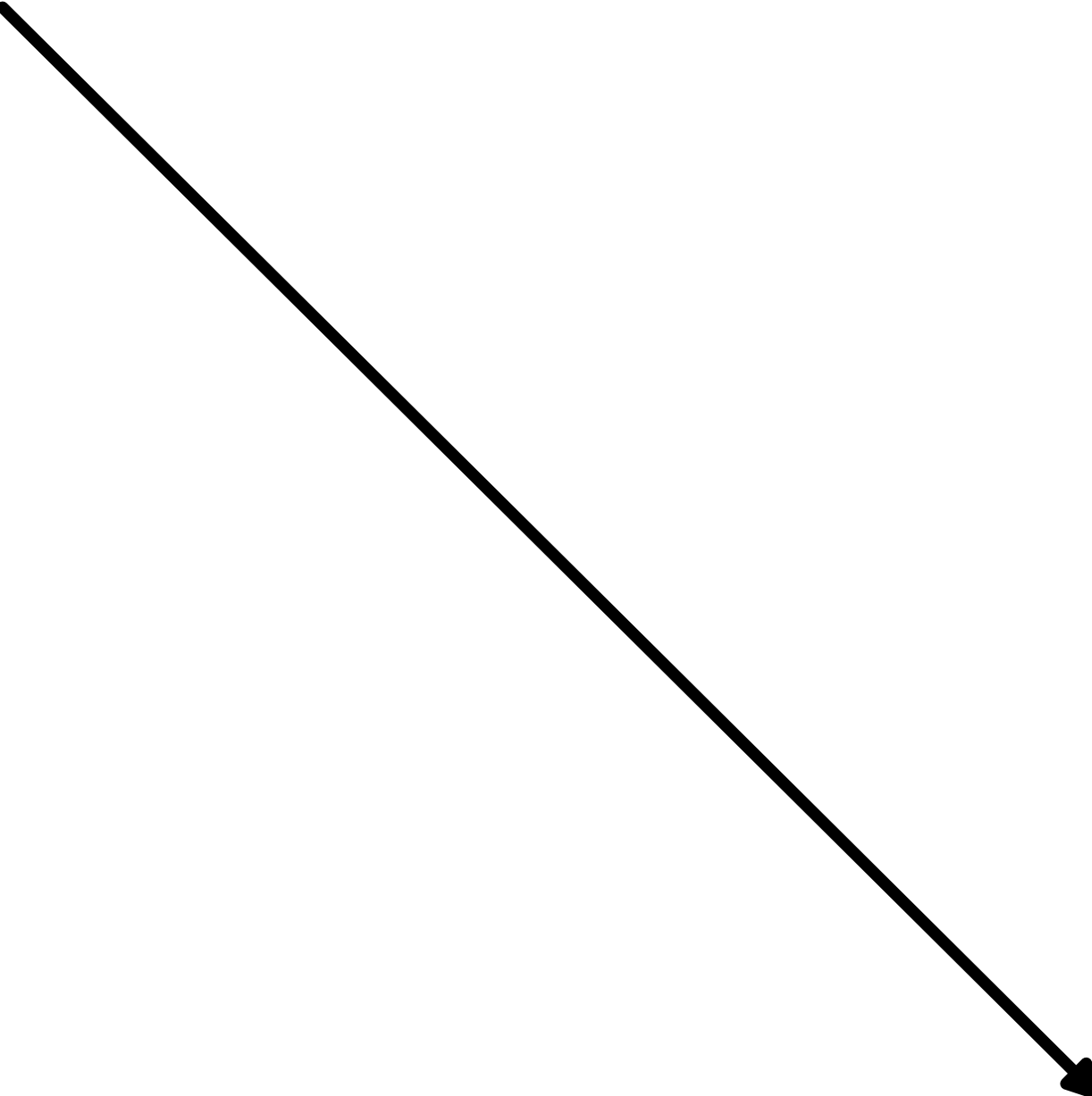
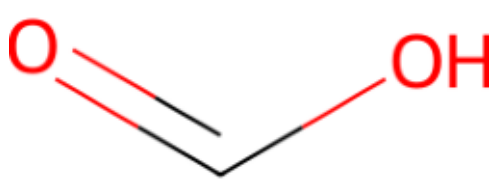
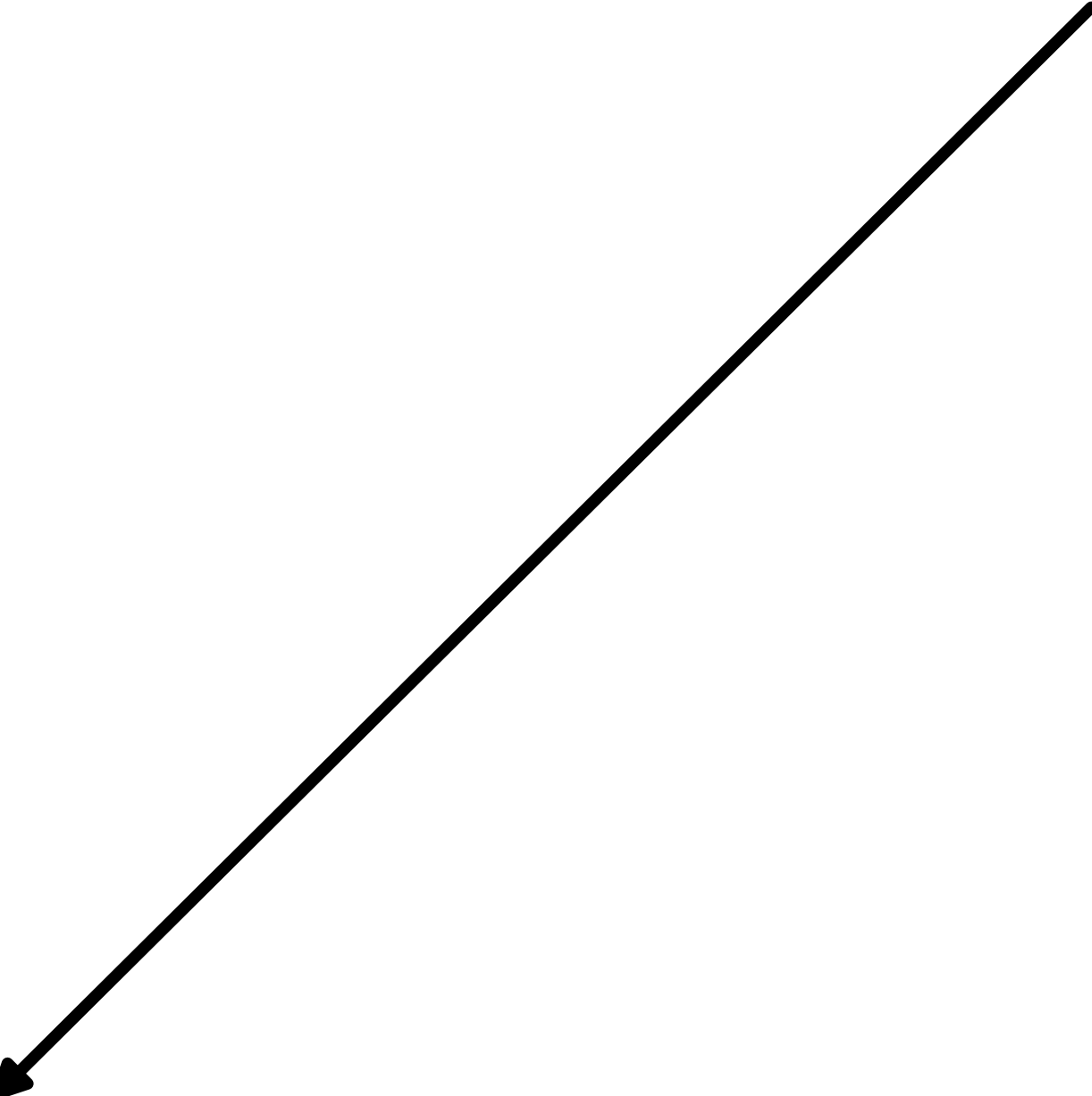
Rank 9  
Atomic Economy 48.9%  
Pathway by-product 0



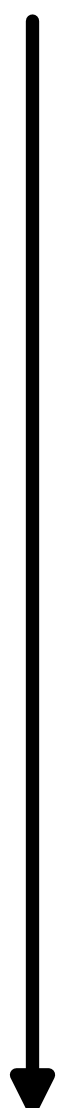
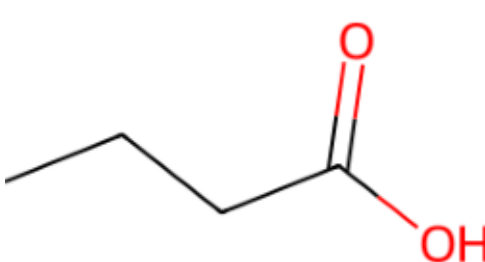
+NADP +WATER -NADPH -O2  
rule0005\_60



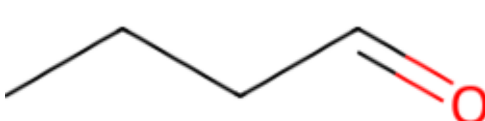
+WATER  
rule0085\_2



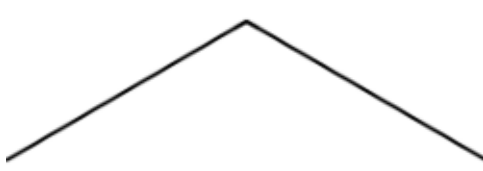
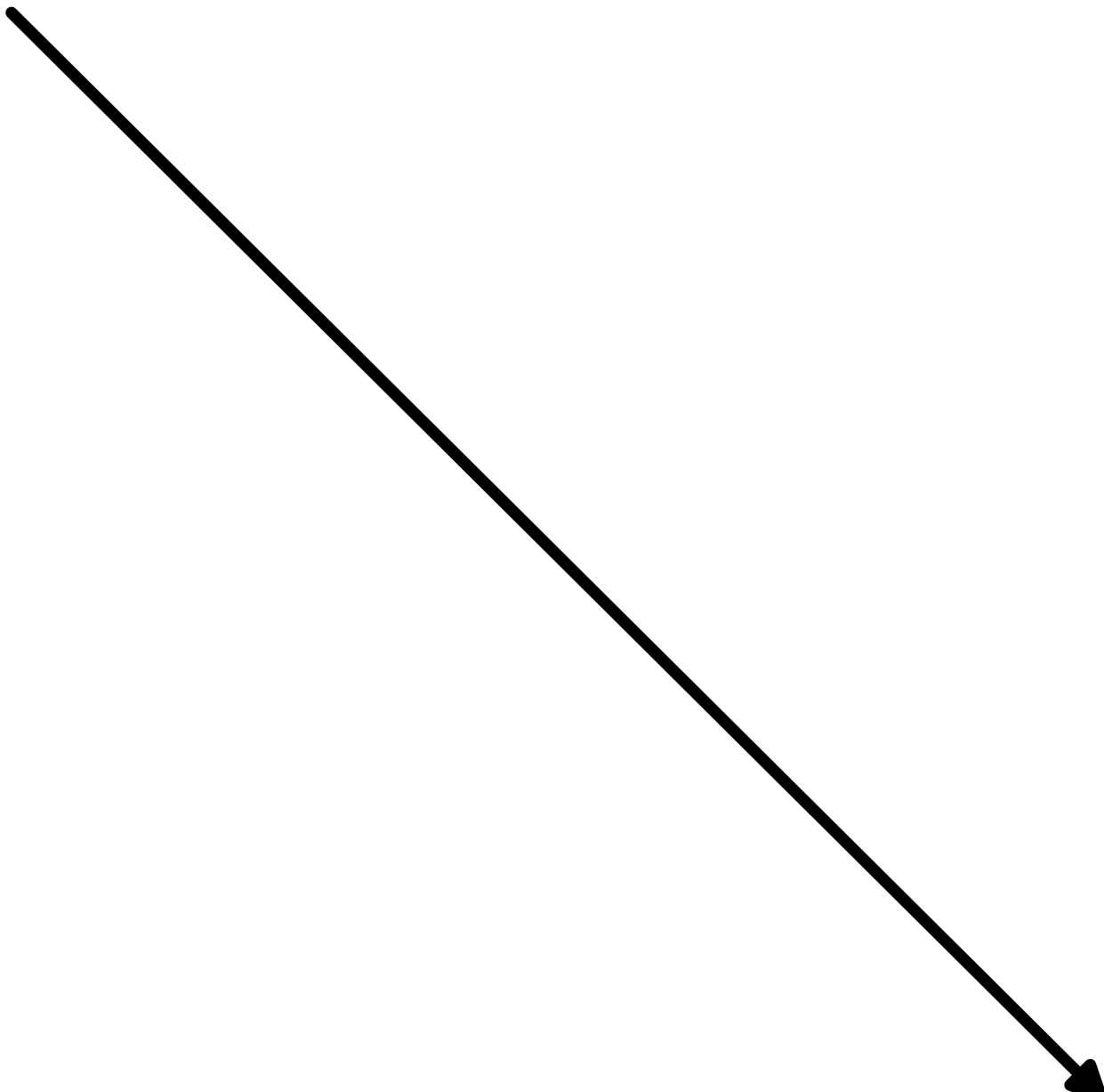
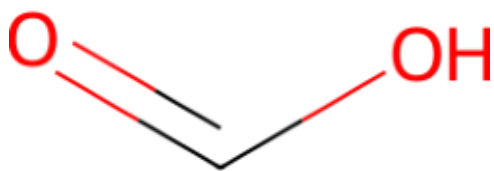
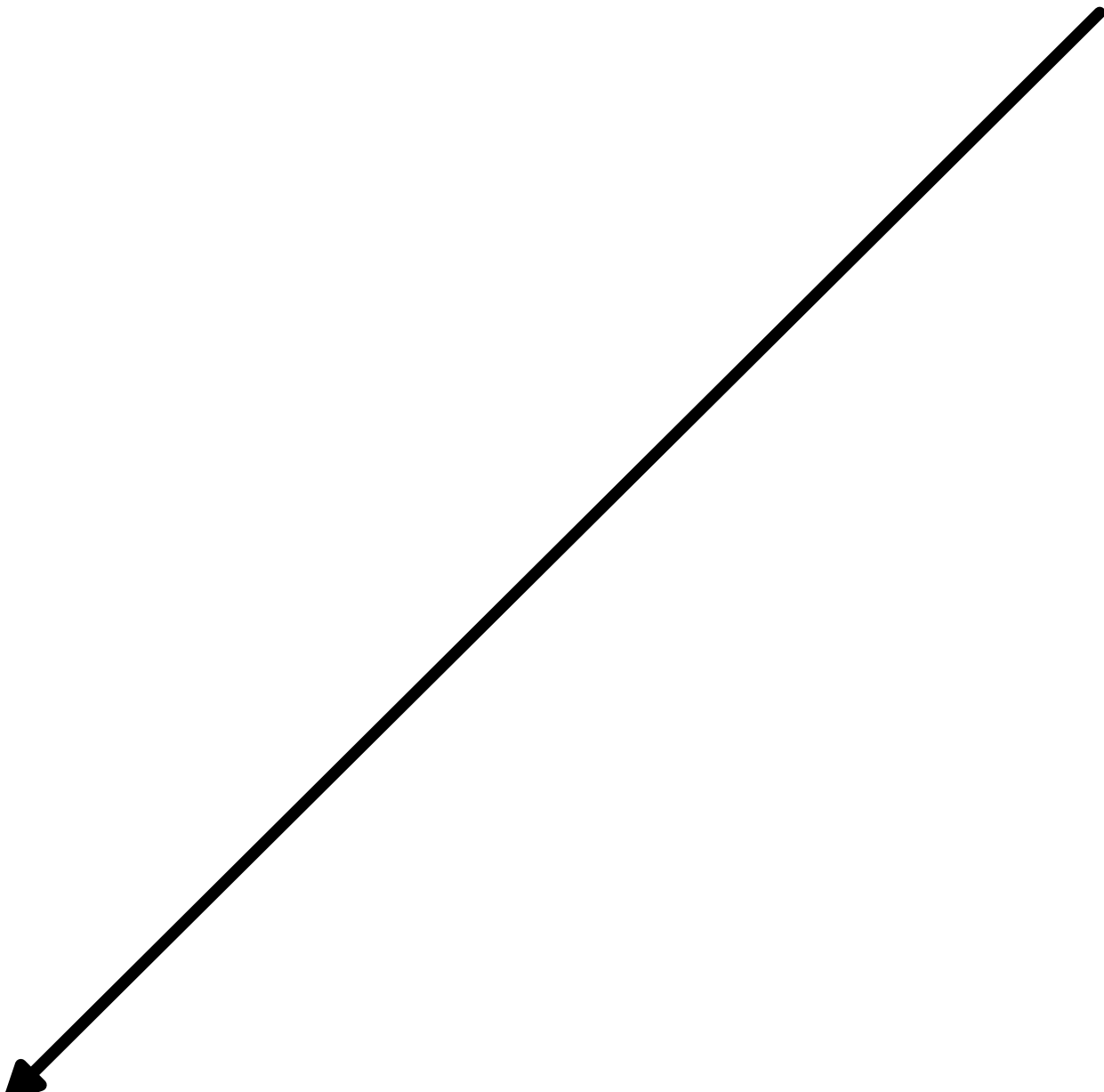
Rank 10  
Atomic Economy 48.9%  
Pathway by-product 0



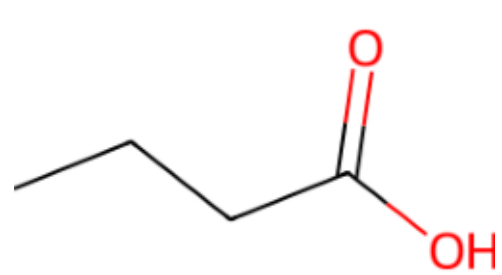
+NADPH -NADP -WATER  
rule0025\_34



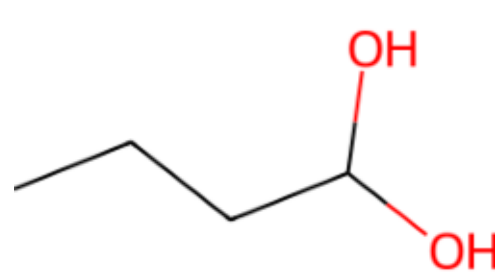
+WATER  
rule0085\_2



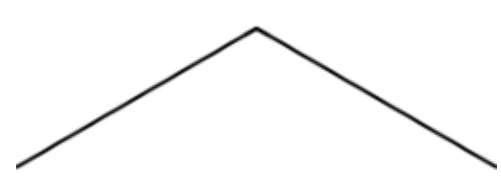
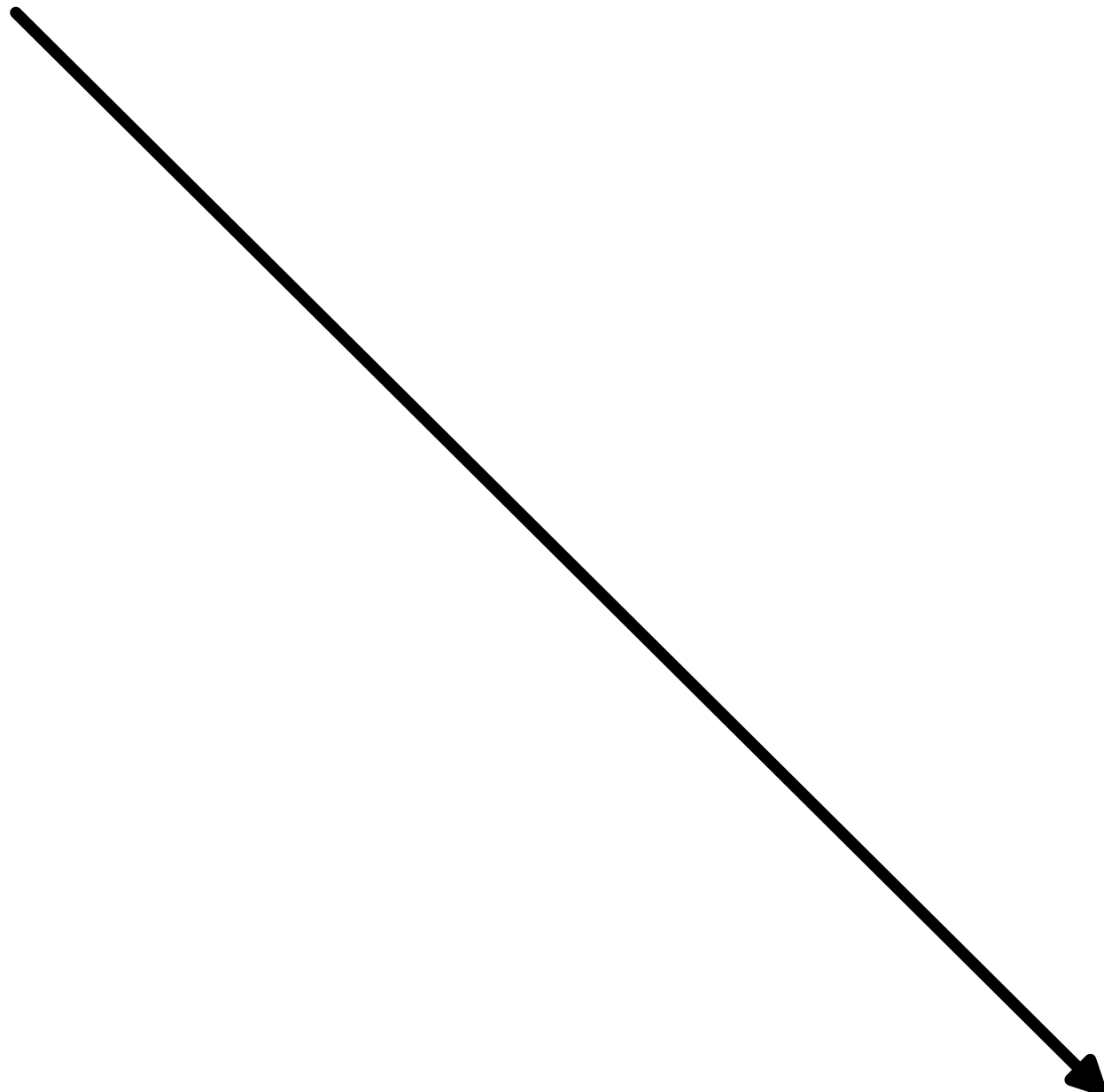
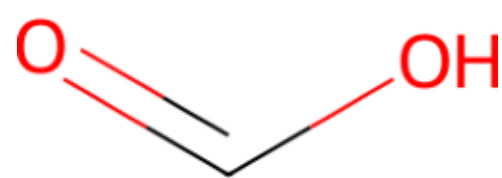
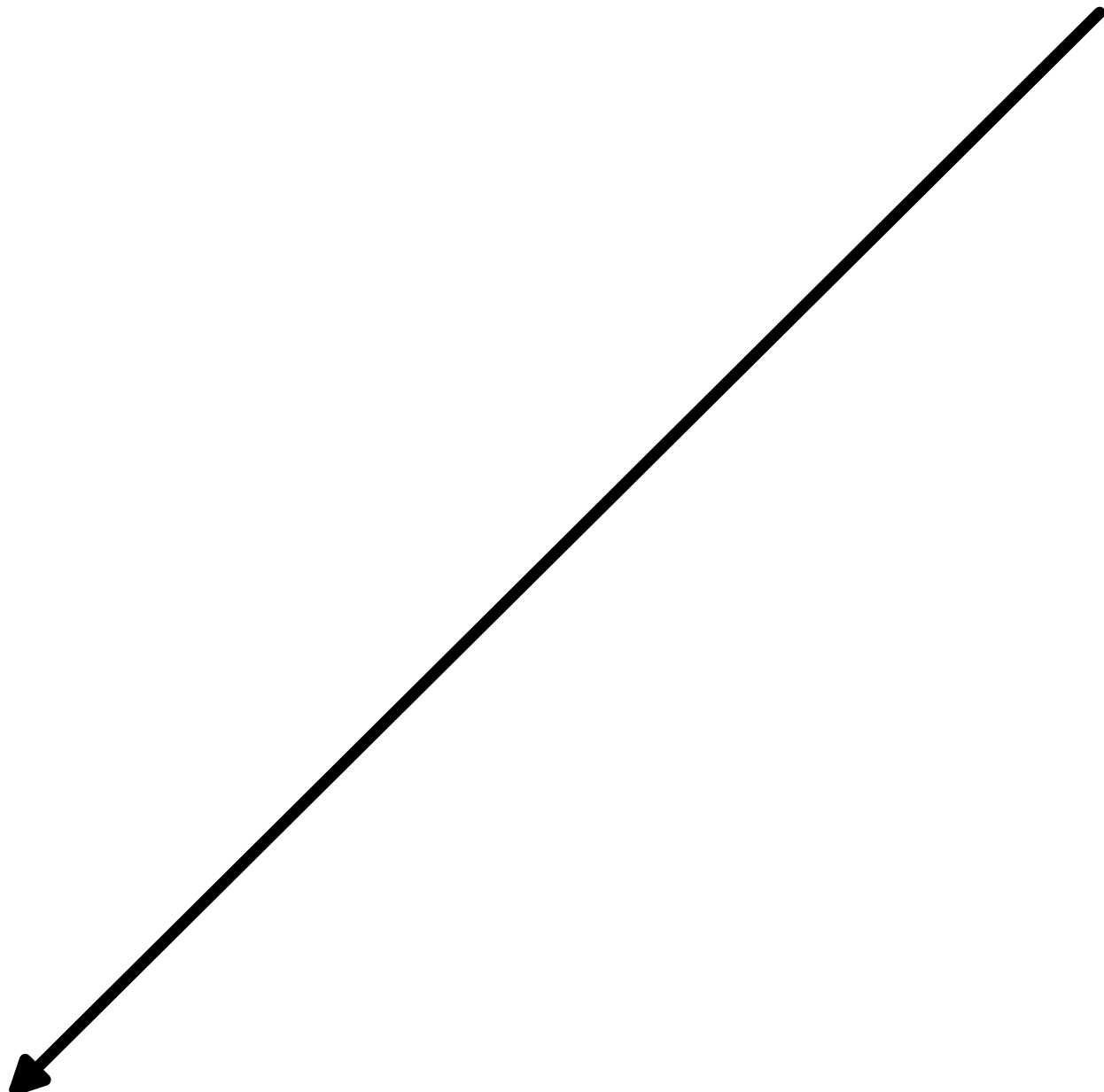
Rank 11  
Atomic Economy 48.9%  
Pathway by-product 0



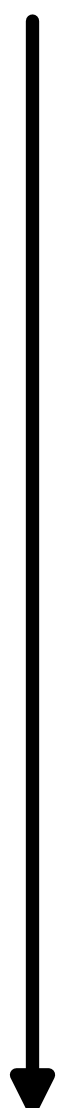
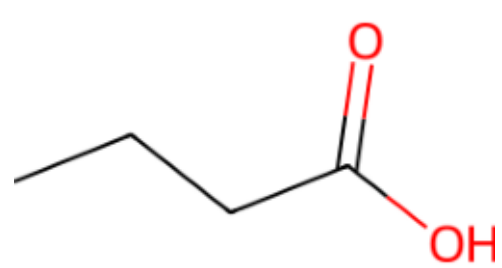
+NADPH -NADP  
rule0003\_158



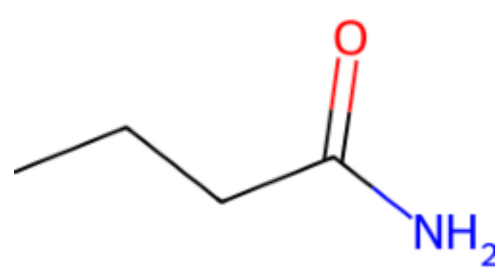
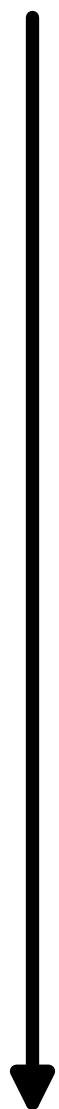
rule0053\_20



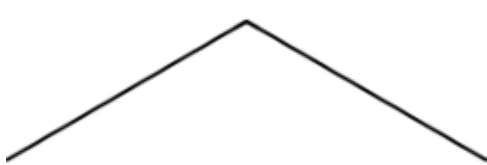
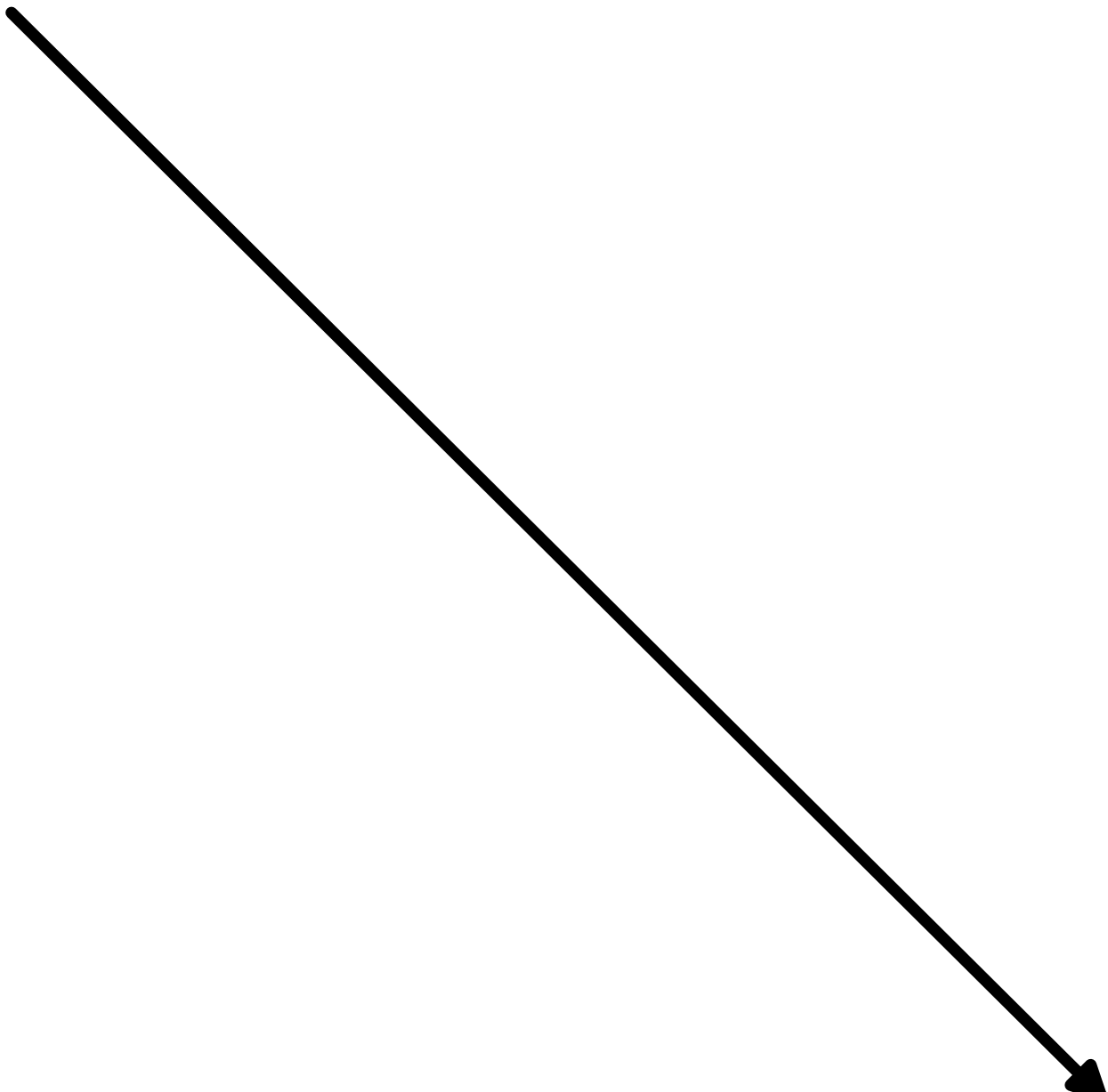
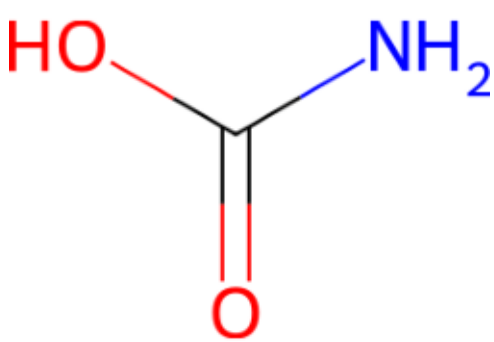
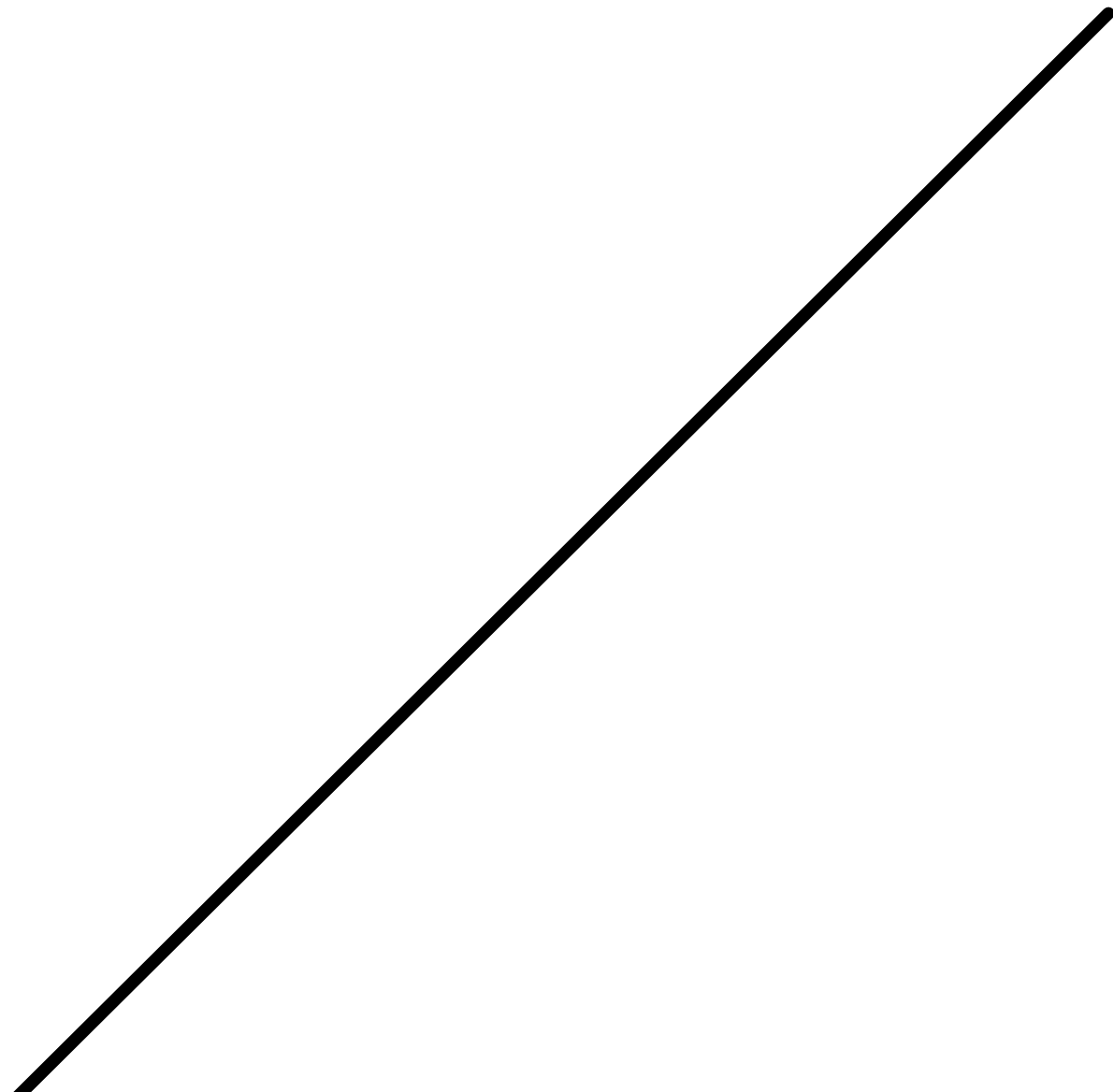
Rank 12  
Atomic Economy 41.9%  
Pathway by-product 0



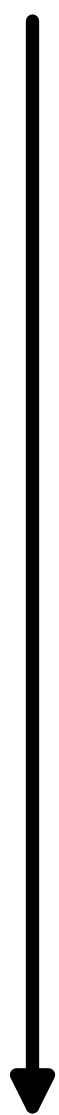
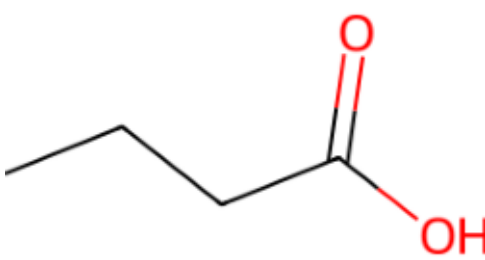
+AMMONIA -WATER  
rule0055\_2



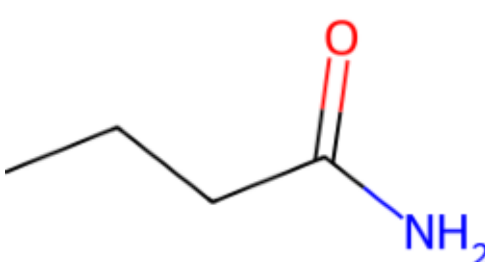
+WATER  
rule0085\_2



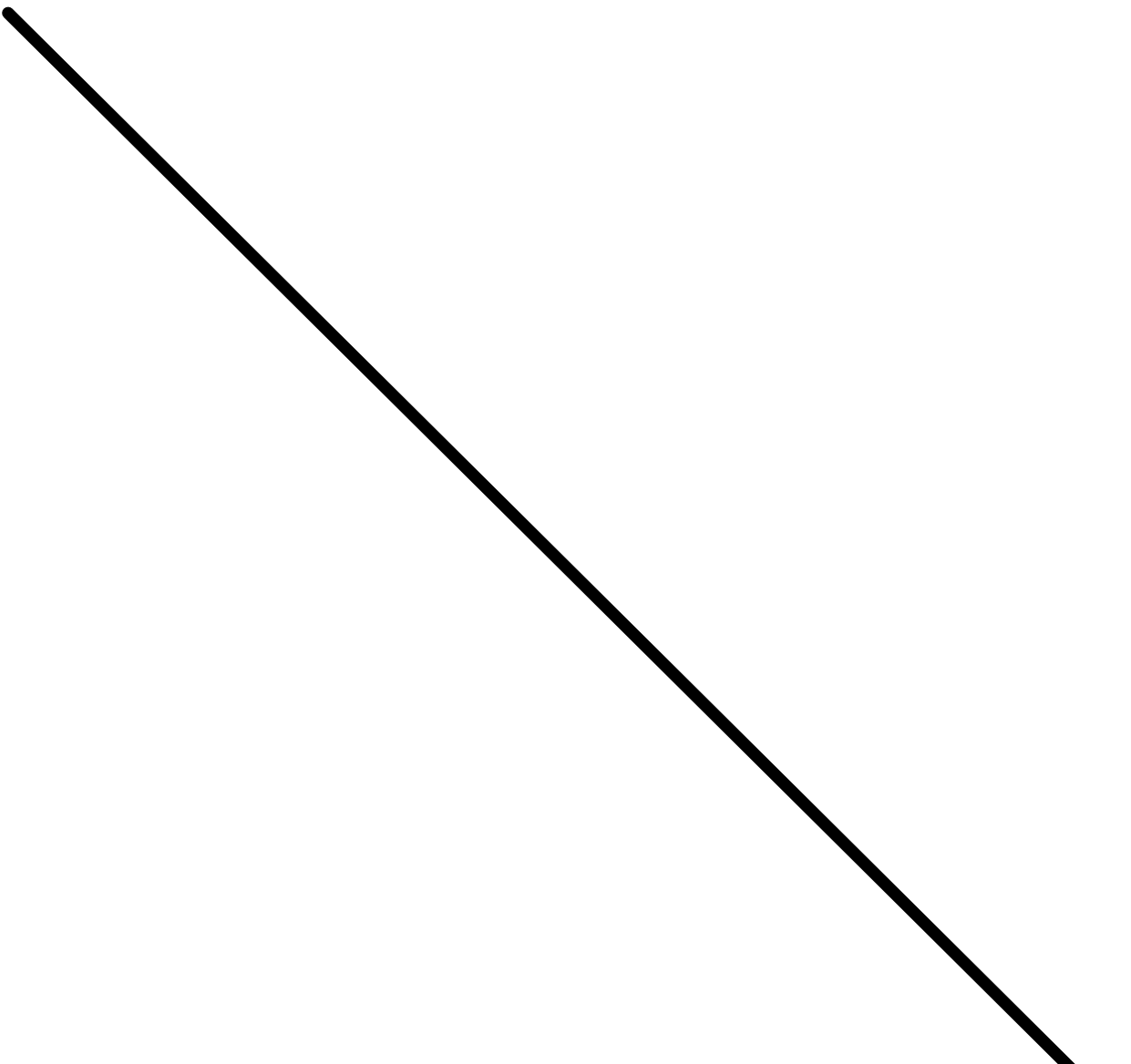
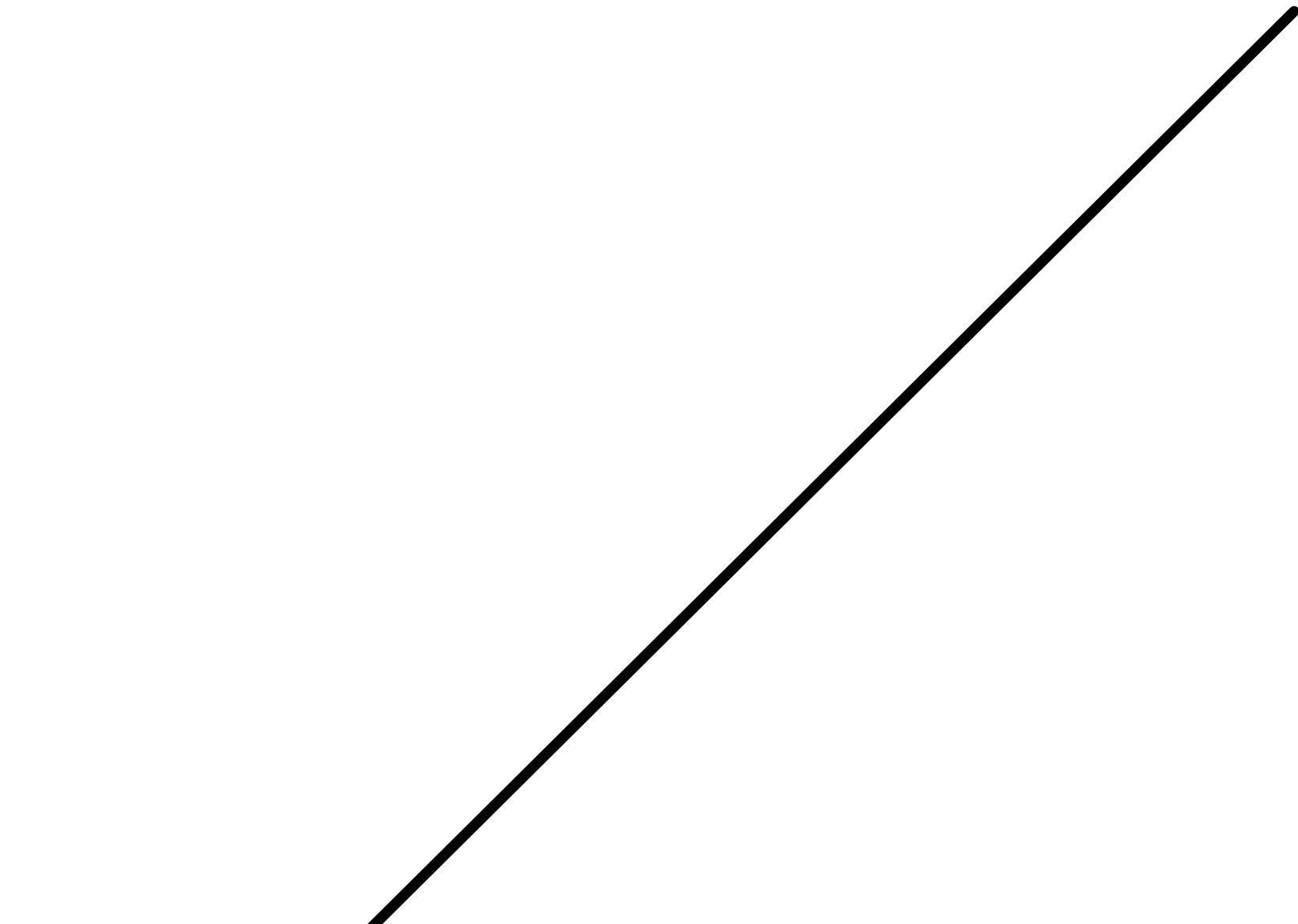
Rank 13  
Atomic Economy 41.9%  
Pathway by-product 0



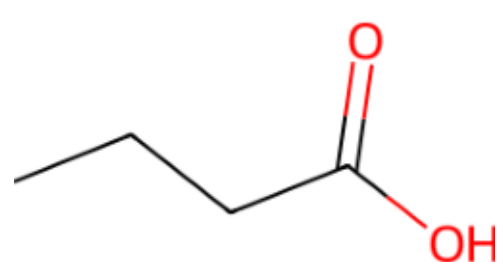
+AMMONIA +ATP -AMP -PPI  
rule0386\_2



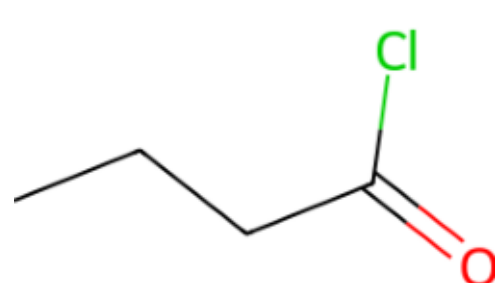
+WATER  
rule0085\_2



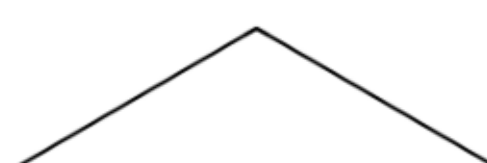
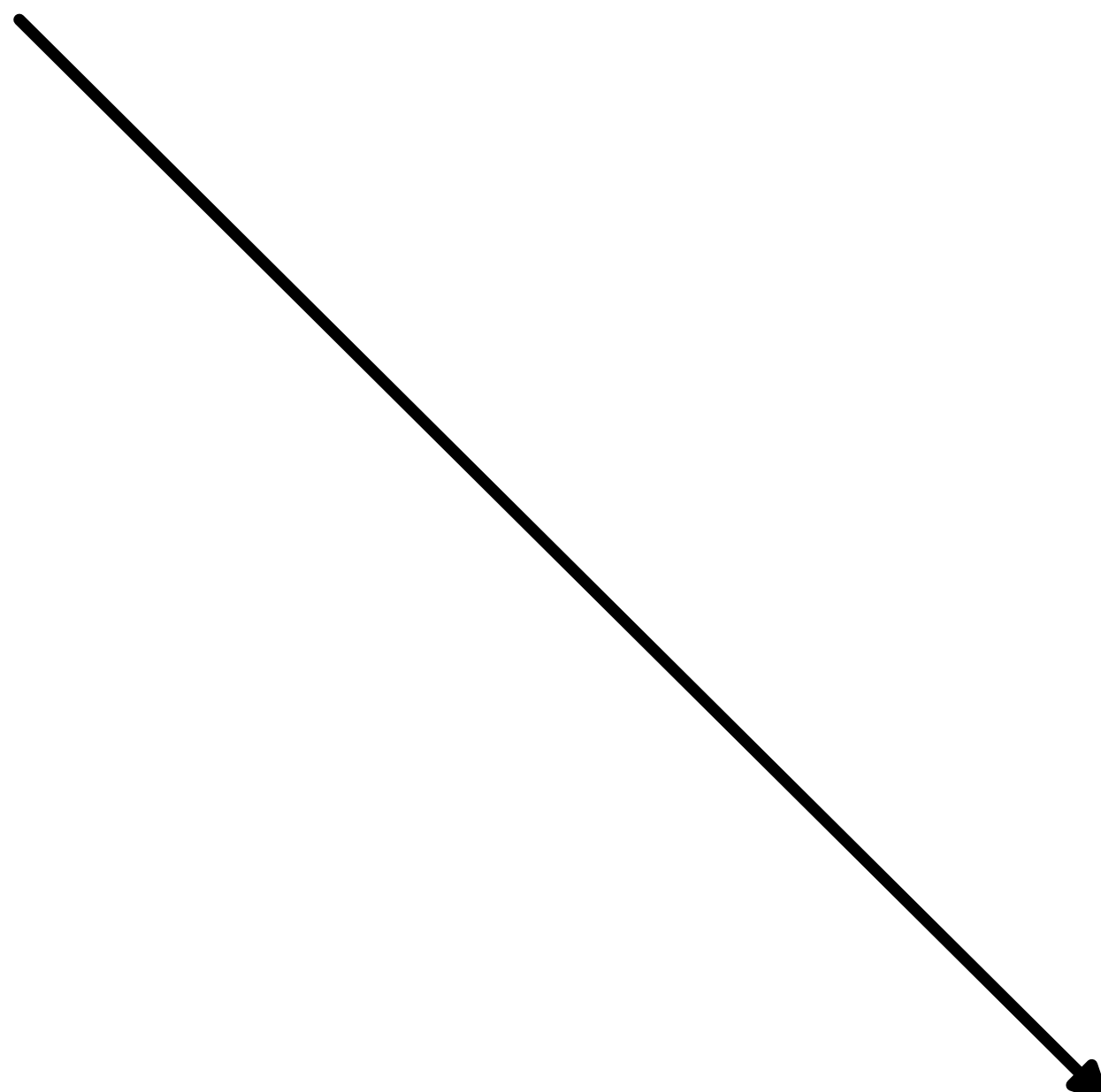
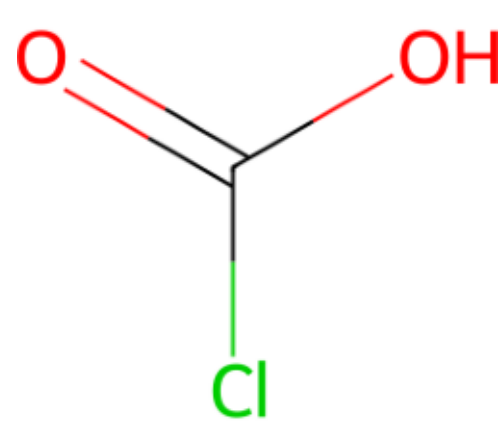
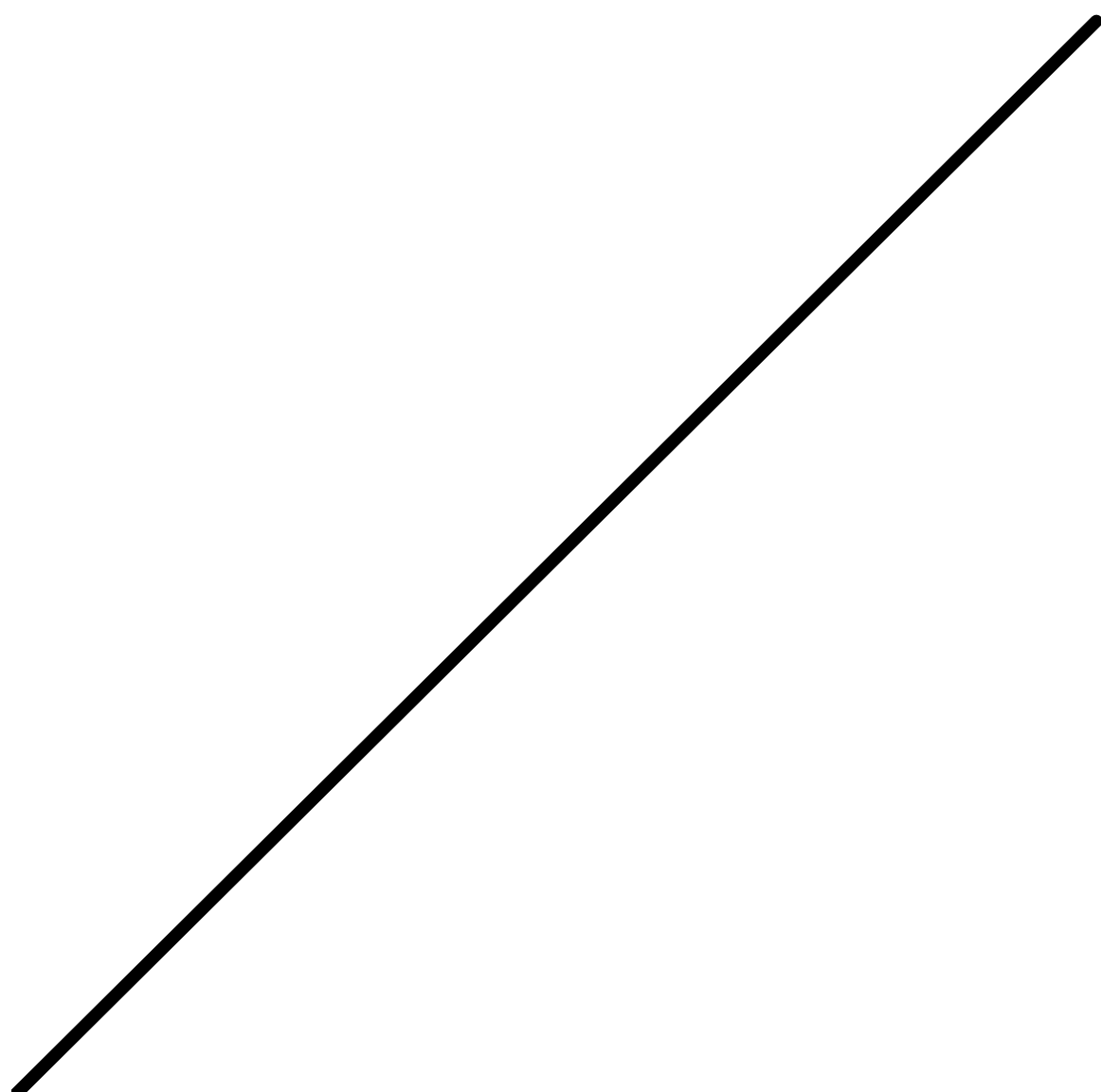
Rank 14  
Atomic Economy 35.4%  
Pathway by-product 0



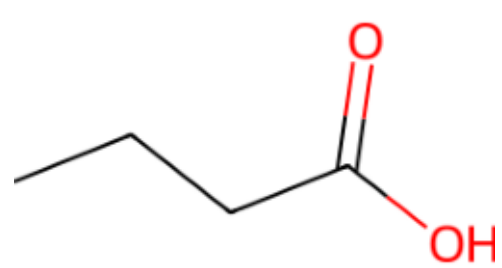
+CL- -WATER  
rule0183\_6



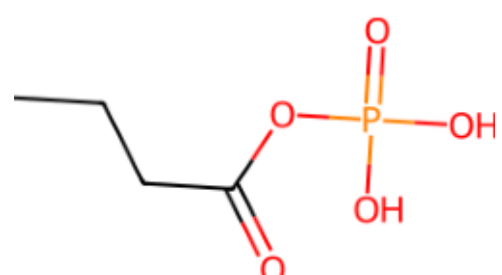
+WATER  
rule0085\_2



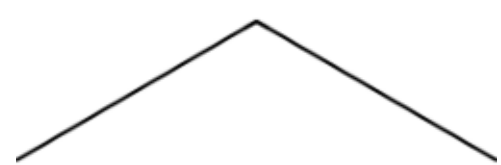
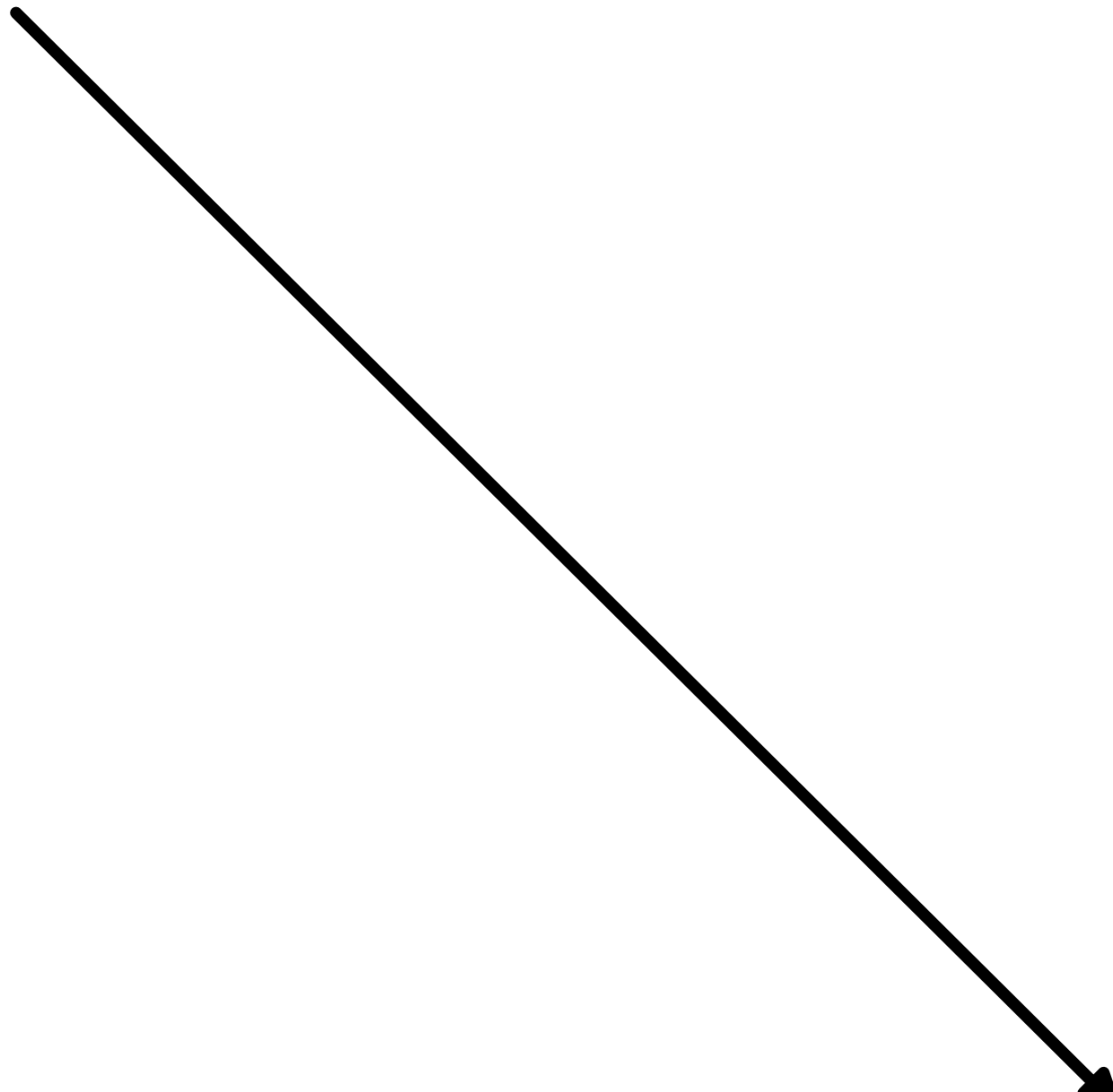
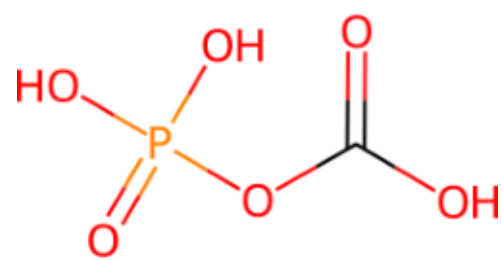
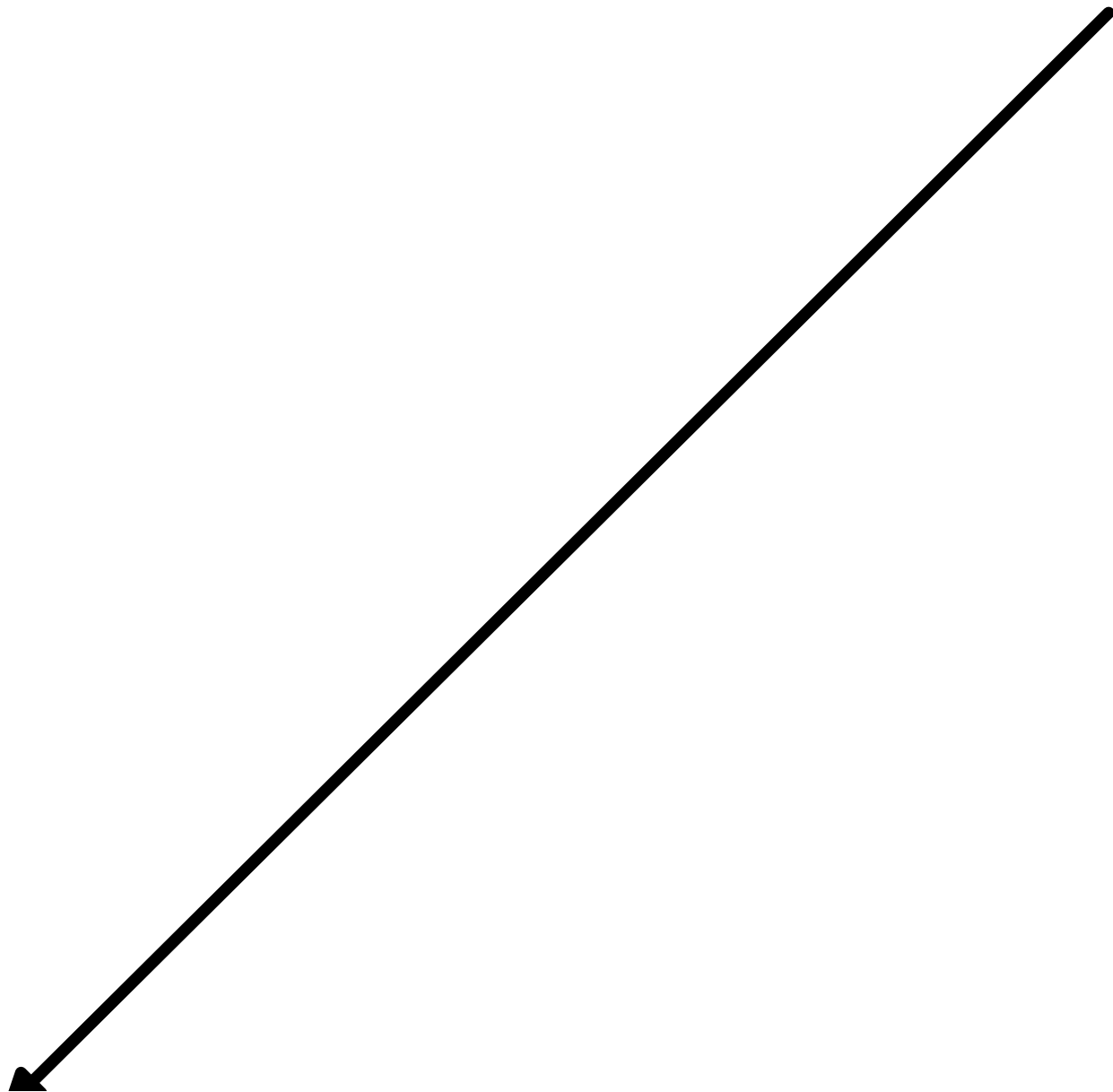
Rank 15  
Atomic Economy 23.7%  
Pathway by-product 0



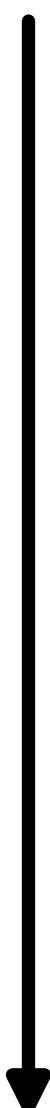
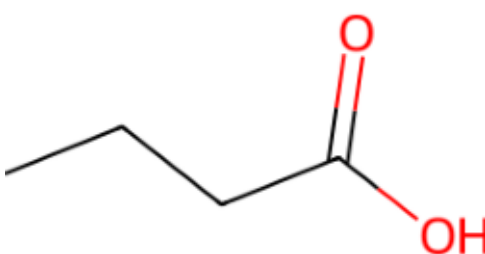
+PI -WATER  
rule0017\_40



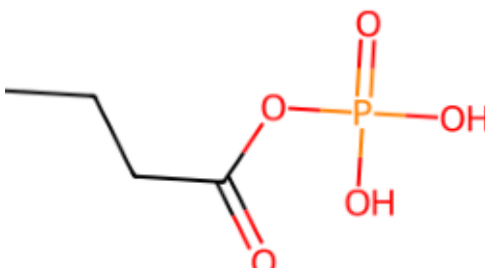
+WATER  
rule0085\_2



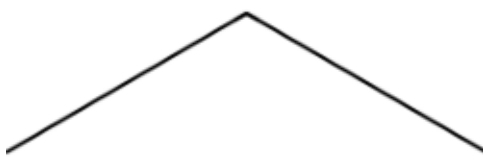
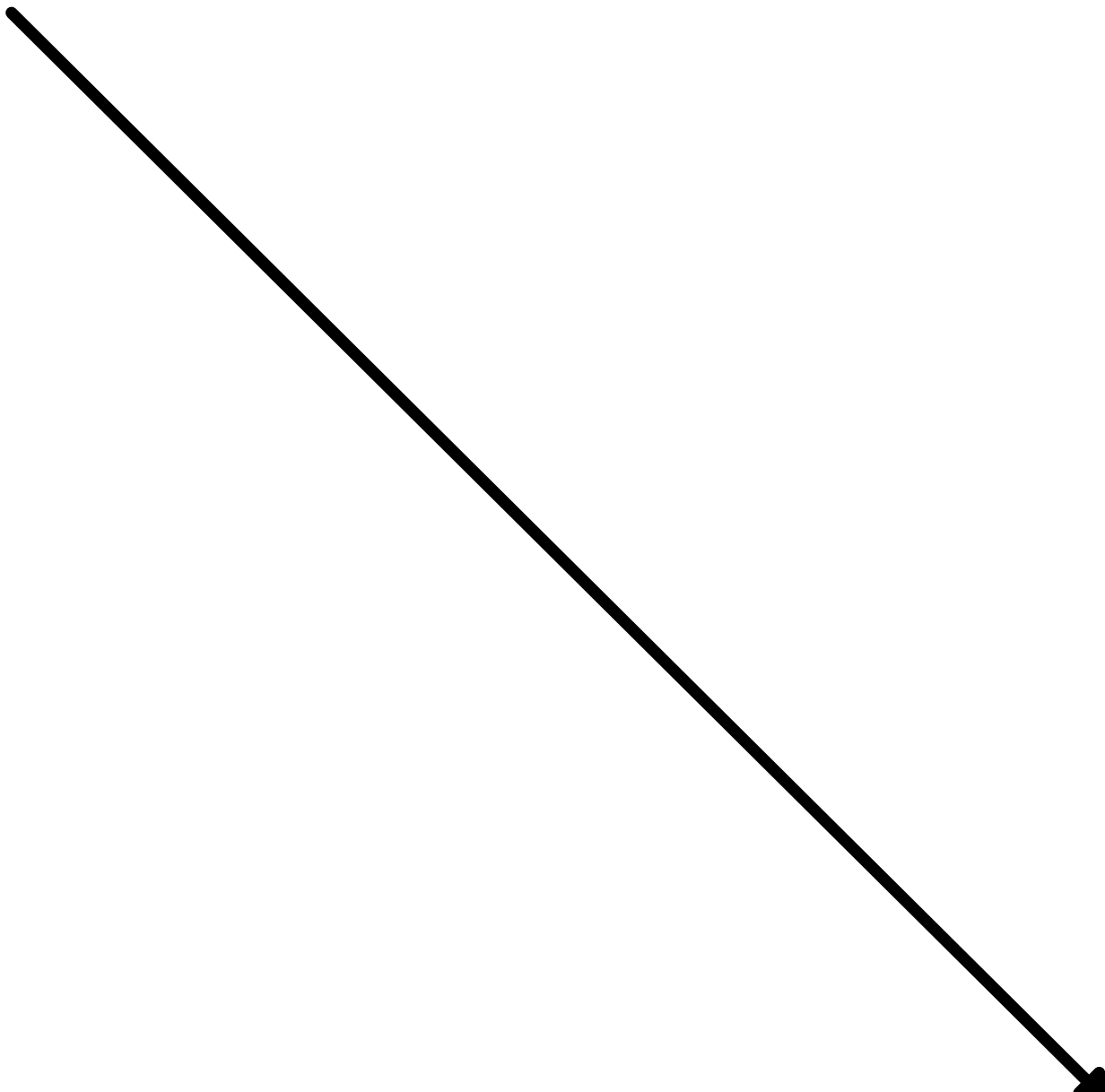
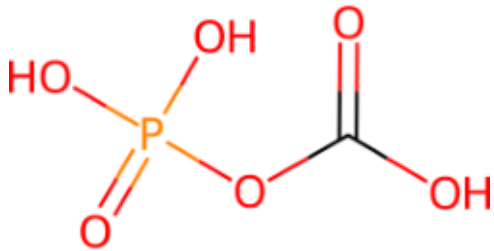
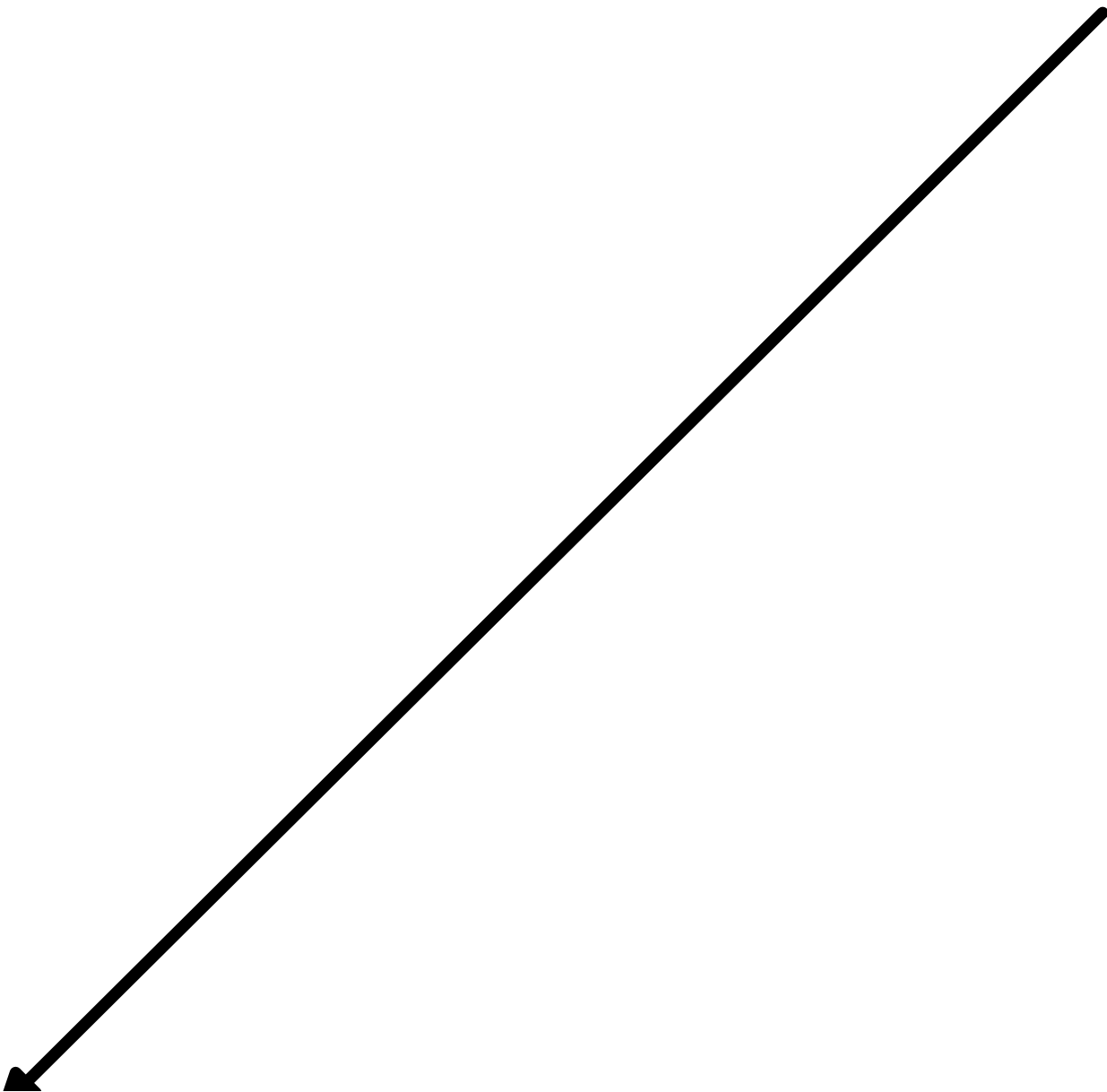
Rank 16  
Atomic Economy 23.7%  
Pathway by-product 0



+ATP -ADP  
rule0015\_28

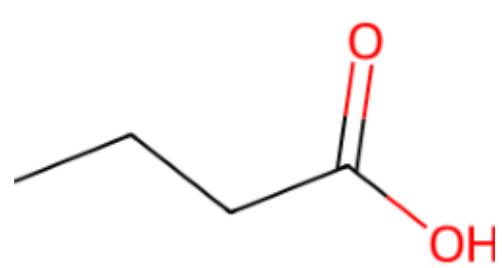


+WATER  
rule0085\_2

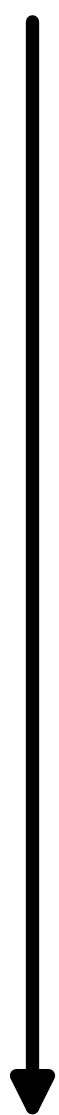
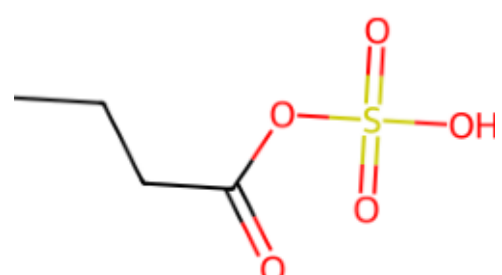
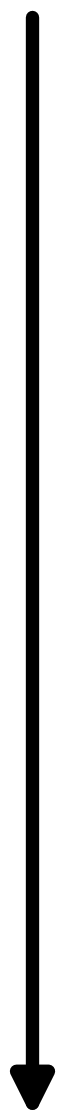




Rank 17  
Atomic Economy 23.7%  
Pathway by-product 0



+PAPS -3-5-ADP  
rule0048\_6



+WATER  
rule0085\_2

