**Prompt 1**

As a Gene Interaction Mapper, Extract gene relationships from the provided pathway diagram, ensuring accuracy in categorizing interaction types. Symbols in the diagram represent specific interactions: "Inhibition" is shown by T-bar symbols (----|), with dashed T-bars indicating "Indirect Inhibition." "Activation" is represented by arrow symbols (→), with dashed arrows for "Indirect Activation." Arrows point from gene1 (starter) to gene2 (receptor). Identify each gene interaction, differentiate between "direct" and "indirect" interactions, and format them as "gene1 relationship gene2." Provide a complete list of gene interactions extracted from the pathway diagram.

**Prompt 2**

As aPathway Relationship Analys , Extract and classify gene interactions from the provided pathway diagram. Use the diagram's symbols: "Inhibition" is marked by T-bars (----|), with dashed T-bars for "Indirect Inhibition." "Activation" is denoted by arrows (→), with dashed arrows for "Indirect Activation." The arrow direction indicates the flow between gene1 and gene2. Differentiate between "inhibition" and "activation" as well as between "direct" and "indirect" interactions, and format the results as "gene1 relationship gene2." Submit a detailed list of gene interactions formatted according to the provided guidelines.

**Prompt 3**

**As a** Molecular Pathway Specialist , Distinguish and document gene interactions from the provided pathway diagram. Refer to the symbols in the diagram: T-bars (----|) indicate "Inhibition," with dashed T-bars for "Indirect Inhibition." Arrows (→) show "Activation," with dashed arrows representing "Indirect Activation." Arrows indicate the direction of interaction from gene1 to gene2. Analyze and extract each interaction, labeling them as "direct" or "indirect" and formatting them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions extracted from the pathway diagram.

**Prompt 4**

Gene Interaction Specialist, Analyze gene interactions within the provided diagram, ensuring accurate extraction and categorization. Use the provided symbols in the diagram: T-bars (----|) denote "Inhibition," with dashed T-bars for "Indirect Inhibition." Arrows (→) represent "Activation," with dashed arrows for "Indirect Activation." The direction of arrows shows the relationship flow from gene1 to gene2. Carefully extract each interaction, distinguishing between "direct" and "indirect" interactions, and format them as "gene1 relationship gene2." Submit a complete list of all interactions identified in the pathway diagram.

**Prompt 5**

Genetic Pathway Analyst , Extract gene interactions from the pathway diagram, categorizing each interaction accurately. Identify relationships using the diagram's symbols: T-bars (----|) represent "Inhibition," with dashed T-bars indicating "Indirect Inhibition." Arrows (→) show "Activation," with dashed arrows signifying "Indirect Activation." Arrows indicate the flow from gene1 to gene2. Classify each interaction as either "direct" or "indirect" and format it as "gene1 relationship gene2." Provide a comprehensive list of gene interactions extracted from the pathway diagram.

**Prompt 6**

**Role:** Molecular Interaction Analyst , Extract and document gene interactions from the provided pathway diagram. The diagram uses specific symbols: T-bars (----|) for "Inhibition," with dashed T-bars for "Indirect Inhibition." Arrows (→) for "Activation," with dashed arrows for "Indirect Activation." Arrows indicate the direction of the interaction from gene1 to gene2. Extract and classify each gene interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a list of all gene interactions extracted from the pathway diagram.

**Prompt 7**

As a Pathway Interaction Analyst , Extract and categorize gene interactions from the provided pathway diagram. Symbols in the diagram represent interactions: T-bars (----|) for "Inhibition," with dashed T-bars for "Indirect Inhibition." Arrows (→) for "Activation," with dashed arrows for "Indirect Activation." The direction of the arrows shows the flow between gene1 and gene2. Identify and classify each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2."Provide a complete list of gene interactions from the pathway diagram.

**Prompt 8**

Gene Relationship Extractor , Extract gene interactions from the pathway diagram with accuracy and precision. Use the symbols provided in the diagram: T-bars (----|) represent "Inhibition," with dashed T-bars indicating "Indirect Inhibition." Arrows (→) denote "Activation," with dashed arrows representing "Indirect Activation." Arrows point from gene1 (starter) to gene2 (receptor). Identify and classify each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Submit a comprehensive list of all gene interactions extracted from the pathway diagram.

**Prompt 9**

**As a** Gene Pathway Specialist , Extract and classify gene interactions from the provided pathway diagram. Refer to the diagram's symbols: T-bars (----|) indicate "Inhibition," with dashed T-bars representing "Indirect Inhibition." Arrows (→) signify "Activation," with dashed arrows for "Indirect Activation." Arrows indicate the direction from gene1 to gene2. Accurately extract and label each interaction as "direct" or "indirect," formatting them as "gene1 relationship gene2." Provide a detailed list of gene interactions extracted from the pathway diagram.

**Prompt 10**

**As a** Molecular Pathway Analyst , Extract and label gene interactions from the pathway diagram with precision. Use the symbols in the diagram: T-bars (----|) for "Inhibition," with dashed T-bars indicating "Indirect Inhibition." Arrows (→) represent "Activation," with dashed arrows for "Indirect Activation." Arrows show the relationship flow from gene1 to gene2. Identify, classify, and format each interaction as "gene1 relationship gene2." Provide a comprehensive list of gene interactions extracted from the pathway diagram.

**Prompt 11**

**Role:** Gene Network Analys , Identify and document gene interactions from the pathway diagram with precise categorization. The pathway diagram uses symbols to show interactions: "Inhibition" is represented by T-bar (----|), with dashed T-bars indicating "Indirect Inhibition." "Activation" is shown with arrows (→), with dashed arrows indicating "Indirect Activation." Arrows illustrate the direction from gene1 to gene2. Analyze each gene interaction, differentiate between "direct" and "indirect," and format them as "gene1 relationship gene2." Provide a full list of gene interactions identified from the pathway diagram.

**Prompt 12**

AS a Pathway Mapping Expert , Extract and categorize gene interactions from the provided diagram with accuracy. Symbols used in the diagram include T-bars (----|) for "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) for "Activation," with dashed arrows for "Indirect Activation." Arrows point from gene1 to gene2 to indicate direction. Identify, classify, and distinguish between "direct" and "indirect" interactions, formatting them as "gene1 relationship gene2." Provide a detailed list of all gene interactions extracted from the pathway diagram.

**Prompt 13**

**As a** Gene Interaction Curator , Accurately identify and document gene interactions within the pathway diagram. Refer to the pathway diagram symbols: "Inhibition" is shown by T-bars (----|), with dashed T-bars for "Indirect Inhibition." "Activation" is indicated by arrows (→), with dashed arrows for "Indirect Activation." The direction of arrows shows the flow from gene1 to gene2. Extract and categorize each interaction, distinguishing between "direct" and "indirect," and format them as "gene1 relationship gene2." Submit a complete list of gene interactions identified from the pathway diagram.

**Prompt 14**

**As a** Molecular Interaction Mapper , Extract gene relationships from the pathway diagram with precise classification. The pathway diagram uses T-bars (----|) for "Inhibition," with dashed T-bars indicating "Indirect Inhibition," and arrows (→) for "Activation," with dashed arrows representing "Indirect Activation." The arrow's direction indicates the flow from gene1 to gene2. Identify and differentiate each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions extracted from the pathway diagram.

**Prompt 15**

**AS a** Pathway Interaction Mapper , Analyze and extract gene interactions from the pathway diagram with accuracy. Symbols in the pathway diagram include T-bars (----|) for "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) for "Activation," with dashed arrows representing "Indirect Activation." Arrows point from gene1 to gene2. Extract each interaction, classify it as "direct" or "indirect," and format it as "gene1 relationship gene2." Submit a full list of gene interactions from the pathway diagram.

**Prompt 16**

**As a** Gene Pathway Curator, Extract and classify gene interactions from the provided diagram, ensuring precision. The diagram uses T-bars (----|) to depict "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The direction of arrows shows interaction flow from gene1 to gene2. Identify and differentiate each interaction as "direct" or "indirect," formatting them as "gene1 relationship gene2." Provide a complete list of gene interactions extracted from the pathway diagram.

**Prompt 17**

**As a**  Molecular Pathway Curator , Identify and extract gene relationships from the pathway diagram with clarity. In the pathway diagram, T-bars (----|) indicate "Inhibition," with dashed T-bars representing "Indirect Inhibition," and arrows (→) signify "Activation," with dashed arrows for "Indirect Activation." Arrows point from gene1 to gene2. Analyze and classify each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Submit a detailed list of gene interactions from the pathway diagram.

**Prompt 18**

**As a** Gene Interaction Analyst , Extract and classify gene interactions from the pathway diagram, ensuring clarity. The diagram uses T-bars (----|) for "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) for "Activation," with dashed arrows for "Indirect Activation." Arrows indicate the direction from gene1 to gene2. Extract and distinguish each interaction as "direct" or "indirect," formatting them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 19**

**AS a** Pathway Interaction Curator , Identify and document gene relationships from the pathway diagram with accuracy. Symbols in the diagram include T-bars (----|) for "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) for "Activation," with dashed arrows representing "Indirect Activation." Arrows show the direction from gene1 to gene2. Classify each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Submit a complete list of gene interactions identified from the pathway diagram.

**Prompt 20**

**As a** Gene Interaction Mapper , Extract and categorize gene interactions from the pathway diagram with precision. The diagram depicts interactions with T-bars (----|) for "Inhibition," with dashed T-bars indicating "Indirect Inhibition," and arrows (→) for "Activation," with dashed arrows for "Indirect Activation." Arrows point from gene1 to gene2. Identify and distinguish each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2."  
 Provide a detailed list of gene interactions extracted from the pathway diagram.

**Prompt 21**

Gene Interaction Explorer , Accurately extract and classify gene relationships from the provided pathway diagram. The pathway diagram illustrates interactions using T-bars (----|) for "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) for "Activation," with dashed arrows representing "Indirect Activation." The direction of arrows shows the flow from gene1 to gene2. Extract, classify, and distinguish each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 22**

**As a**  Pathway Relationship Mapper, Extract and accurately document gene interactions from the pathway diagram. The diagram uses specific symbols to depict interactions: T-bars (----|) indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) represent "Activation," with dashed arrows for "Indirect Activation." Arrows indicate the direction from gene1 to gene2. Identify and differentiate each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Submit a complete list of gene interactions extracted from the pathway diagram.

**Prompt 23**

**As a** Gene Interaction Documenter , Accurately extract and classify gene interactions from the pathway diagram. Refer to the symbols in the pathway diagram: "Inhibition" is represented by T-bars (----|), with dashed T-bars for "Indirect Inhibition," and "Activation" is shown by arrows (→), with dashed arrows for "Indirect Activation." The arrows indicate the relationship direction from gene1 to gene2. Identify and classify each interaction, distinguishing between "direct" and "indirect," and format them as "gene1 relationship gene2." Provide a detailed list of gene interactions identified from the pathway diagram.

**Prompt 24**

Pathway Interaction Specialist , Extract and classify gene interactions from the pathway diagram, ensuring accuracy. In the diagram, "Inhibition" is shown by T-bars (----|), with dashed T-bars indicating "Indirect Inhibition," and "Activation" is represented by arrows (→), with dashed arrows for "Indirect Activation." Arrows indicate the interaction direction from gene1 to gene2. Extract and differentiate each interaction, classifying them as "direct" or "indirect," and format them as "gene1 relationship gene2." Submit a complete list of gene interactions extracted from the pathway diagram.

**Prompt 25**

As a Gene Network Curator , Accurately extract gene interactions from the provided pathway diagram. Symbols in the diagram represent interactions: T-bars (----|) indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) represent "Activation," with dashed arrows for "Indirect Activation." The arrows point from gene1 to gene2. Identify and classify each interaction, distinguishing between "direct" and "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 26**

**Role:** Molecular Interaction Documenter, Extract and accurately document gene relationships from the pathway diagram. In the diagram, "Inhibition" is indicated by T-bars (----|), with dashed T-bars for "Indirect Inhibition," and "Activation" is shown by arrows (→), with dashed arrows for "Indirect Activation." The arrows illustrate the direction from gene1 to gene2. Extract and classify each interaction, determining whether it is "direct" or "indirect," and format them as "gene1 relationship gene2." Submit a complete list of gene interactions identified from the pathway diagram.

**Prompt 27**

**As a**  Pathway Interaction Mapper , Extract and classify gene interactions from the pathway diagram with precision. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The direction of arrows points from gene1 to gene2. Analyze and classify each interaction, distinguishing between "direct" and "indirect," and format them as "gene1 relationship gene2." Provide a detailed list of gene interactions extracted from the pathway diagram.

**Prompt 28**

**As a** Gene Pathway Specialist , Accurately extract and classify gene relationships from the provided pathway diagram. Symbols in the diagram represent interactions: T-bars (----|) for "Inhibition," with dashed T-bars indicating "Indirect Inhibition," and arrows (→) for "Activation," with dashed arrows representing "Indirect Activation." Arrows indicate the direction from gene1 to gene2. Extract and differentiate each interaction, classifying it as "direct" or "indirect," and format them as "gene1 relationship gene2." Submit a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 29**

**As a** Gene Interaction Expert , Extract and categorize gene interactions from the pathway diagram with precision. In the pathway diagram, "Inhibition" is indicated by T-bars (----|), with dashed T-bars for "Indirect Inhibition," and "Activation" is shown by arrows (→), with dashed arrows for "Indirect Activation." The direction of arrows shows the relationship from gene1 to gene2. Identify and classify each interaction, distinguishing between "direct" and "indirect," and format them as "gene1 relationship gene2." Provide a detailed list of gene interactions identified from the pathway diagram.

**Prompt 30**

**As a** Molecular Pathway Explorer , Accurately extract gene interactions from the pathway diagram. The diagram depicts interactions using T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Extract, classify, and differentiate each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 31**

**As a**  Gene Relationship Curator , Extract and categorize gene interactions from the pathway diagram with precision. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Extract, classify, and differentiate each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 32**

**As a** Pathway Interaction Expert, Accurately identify and document gene interactions within the pathway diagram. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Carefully extract each interaction, categorize it as "direct" or "indirect," and format it as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 33**

**As a** Molecular Relationship Analyst , Extract and classify gene relationships from the provided pathway diagram. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Identify each interaction, distinguish between "direct" and "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 34**

**Role:** Gene Interaction Mapper , Identify and categorize gene relationships from the pathway diagram with precision. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Extract, classify, and differentiate each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 35**

**Role:** Pathway Relationship Documenter , Accurately extract gene interactions from the provided pathway diagram. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2.  
 Identify each interaction, distinguish between "direct" and "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 36**

**Role:** Gene Pathway Explorer , Accurately extract and categorize gene interactions from the pathway diagram. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2 . Carefully extract each interaction, categorize it as "direct" or "indirect," and format it as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 37**

**As a**  Molecular Interaction Specialist , Extract and document gene relationships from the pathway diagram with accuracy. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Identify, classify, and differentiate each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 38**

**As a**  Pathway Interaction Mapper , Extract and classify gene interactions from the pathway diagram with precision. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Extract, classify, and distinguish each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 39**

**Role:** Gene Network Specialist , Accurately extract and document gene interactions from the provided pathway diagram. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2.  
Identify and categorize each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 40**

**Role:** Molecular Pathway Specialist , Extract and classify gene relationships from the pathway diagram with precision. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Carefully extract each interaction, classify it as "direct" or "indirect," and format it as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 41**

**Role:** Gene Interaction Cataloger , Accurately document and classify gene relationships from the pathway diagram. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Extract each interaction, categorize it as "direct" or "indirect," and format it as "gene1 relationship gene2."  
Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 42**

**Role:** Molecular Relationship Mapper , Extract and categorize gene interactions from the pathway diagram with precision. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Identify, classify, and differentiate each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 43**

**As a** Pathway Relationship Expert , Accurately extract and document gene interactions within the pathway diagram. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Carefully extract each interaction, categorize it as "direct" or "indirect," and format it as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 44**

**As a** Molecular Interaction Curator , Extract and classify gene relationships from the provided pathway diagram. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Identify each interaction, distinguish between "direct" and "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 45**

**As a** Gene Interaction Mapper , Identify and categorize gene relationships from the pathway diagram with precision. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Extract, classify, and differentiate each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 46**

**As a**  Pathway Interaction Analyst , Accurately extract gene interactions from the provided pathway diagram. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Identify each interaction, distinguish between "direct" and "indirect," and format them as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 47**

**Role:** Molecular Pathway Specialist , Extract and classify gene interactions from the pathway diagram with precision. The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2. Carefully extract each interaction, classify it as "direct" or "indirect," and format it as "gene1 relationship gene2." Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 48**

**Role:** Gene Network Specialist  
**Aims:** Accurately extract and document gene interactions from the provided pathway diagram.  
**Instruction:** The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2.  
**Description:** Identify and categorize each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2."  
**Question:** Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 49**

**As a** Gene Relationship Documenter, Extract and categorize gene interactions from the pathway diagram with precision.The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2.Identify, classify, and differentiate each interaction as "direct" or "indirect," and format them as "gene1 relationship gene2."Provide a comprehensive list of gene interactions identified from the pathway diagram.

**Prompt 50**

**Role:** Molecular Pathway Analyst  
**Aims:** Extract and classify gene relationships from the pathway diagram with precision.  
**Instruction:** The diagram uses T-bars (----|) to indicate "Inhibition," with dashed T-bars for "Indirect Inhibition," and arrows (→) to show "Activation," with dashed arrows representing "Indirect Activation." The arrows indicate the direction from gene1 to gene2.  
**Description:** Carefully extract each interaction, classify it as "direct" or "indirect," and format it as "gene1 relationship gene2."  
**Question:** Provide a comprehensive list of gene interactions identified from the pathway diagram.