User searching for gene data

Search Engine

1. User submits a search query (e.g., MQSQRSRRRSRAPNTWICF)

2. Search engine processes the query and searches indexed blast database of sequences associated with the gene data.

3. The search engine identifies potential matches.

4. The selected sequence identifiers are retrieved from the managing database of sequence identifiers linked to the gene data.

5. The chosen sequences are returned to the user.

6. The returned data includes both text and images related to the gene data.

Generic logic of a sequence-based search engine responding to a request for gene data (images in this example).