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(54) Title: METHODS TO IDENTIFY SIGNAL SEQUENCES

(57) Abstract: The present invention provides screening methods using bacterial cells to identify nucleic acid sequences encoding eukaryotic proteins comprising signal sequences and/or transmembrane sequences. Provided are several breast cancer and adipose tissue nucleic acid and proteins sequences that encode proteins comprising signal sequences and/or transmembrane sequences. Also provided are diagnostic methods and kits that utilize the proteins identified by the present methods to diagnose and detect diseases, physiological states and conditions, including cancer and those associated with fat metabolism.