This method performs semi-supervised or library aided unmixing using library pruning approach. It identifies the pruned library by measuring the sparsity of the abundance matrix obtained after computing the abundance matrix corresponding each library element. The work is applicable to linear mixing model. Among the prevalent sparsity measures, Gini index and pq-norm sparsity works well.

Please refer to the paper "Sparsity Measure based Library Aided Unmixing of Hyperspectral Image", S. Das, A. Routray, and A.K. Deb, IET Image Processing, 2019.