

```
function [knowledge_vector] = calc_knowledge_supp_BlackTree(delta_vector, cluster_size_vector, num_classes, N)

num_rows = size(delta_vector,1);

for i = 1 : num_rows

    delta = delta_vector(i);

    l = cluster_size_vector(i)*spec_log_BlackTree(num_classes);

    %if true, then the cluster is non-empty
    if(delta != 0)

        V = delta^N;
        knowledge_vector(i) = l/V;

    else

        knowledge_vector(i) = 0;

    endif

endfor

endfunction
```