



**Figure 7:** Pre-membrane effect of rhein (Novartis osteocerein brochure, n.d.)

In the post-membrane effect of diacerein, it prevents IL-1-induced expression of proteins involved in catabolic processes by inhibiting degradation of the inhibitory protein I $\kappa$ B- $\alpha$  and subsequent activation of the transcription factor NF- $\kappa$ B and its translocation to the nucleus, NF- $\kappa$ B stimulates expression of a number of genes involved in inflammation and cartilage catabolism