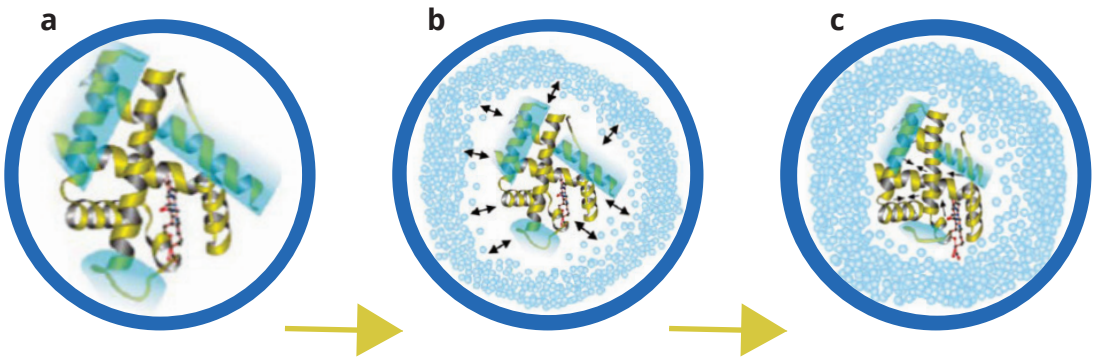
Ectoine

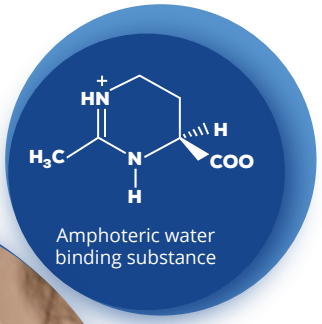
disproquima
LIFE SCIENCE PRODUCTS

A new and promising **active ingredient** for **Cosmetics** and **Medical Device**



Original mechanism of action

Mode of action of extremolytes. The hydrated tertiary structure of globular proteins in aqueous solution (a) is stabilized in the presence of extremolytes (b), wich build solute hydrate clusters that are preferentially excluded from the hydrate shell of the protein). This leads to a more compact tertiary structure with reduced surface area (c). Thus, the solute does not interact directly with the protein, the stabilizing effects are rather due to modification of the solvent (water) properties.



Amphoteric water binding substance

Wide range of uses:

Protection:

- **Cell membranes:** dryness
- **Barrier function:** atopic dermatitis
- **Langerhans cells:** photoallergic reactions
- **Formation of sunburn cells:** photoageing
- **UVA/visible light:** genotoxicity
- **Nasal mucosa:** allergic rhinoconjunctivitis
- **Eye:** eye dryness

Superior activity:

vs Urea: binds more water molecules than urea

vs Hydrocortisone: reduces skin irritation comparable with Hydrocortisone

"Suggested applications, provided they are not protected by patents in force"

c/Terra 42 - Pl.Els Bellots
08227 TERRASSA (Barcelona)
Tel. (+34) 93 731 08 08
Fax. (+34) 93 731 49 14
pharma@disproquima.com