

Examples of functional and exceptions peptides

الدهم نهرك الذي
وعرفت
صل في عالمي

| Protein Name | Amino Acids | exception | Function |
|--|--|--|---|
| Carnosine | <u>β-Alanyl-L-Histidine</u> | Amino group bonds to β Carbon | - Found in muscle + brain - protection - contraction |
| Glutathione | 1. Glutamate. 2. Glycine. 3. Cystine. | Amide bond Occur with C-terminus of Glutamate | - protective role - remove reactive oxygen by reacting. Glutathione + عامل مؤكسدة يحولها إلى عامل اختزال - 2 reduced Glutathione → 1 oxidizing form (disulfide bond). Covalent bond. ← |
| Enkephalins | عبارة عن نوعين Pentapeptides. Tyr-Gly-Gly-phe-Met Tyr-Gly-Gly-phe-Leu. | - differ only in C ¹ . | - Analgesics - similar to morphine. (in brain). |
| Oxytocin + vasopressin ↳ Structure end with OH | Nine residues :- oxytocin: leu + Ile vasopressin: phe + Arg. | - cyclic Hormone also disulfide bond. - have Amide group at C ¹ . | → contraction of uterine. → contraction of smooth muscle |
| Aspartame | L-Aspartyl-L-phe | L → Sweet D → bitter | → could cause cancer. سؤال الله العاقبة |
| Phenylketonuria (pku) | hereditary, defective enzyme المرض يتولد من نقص الإنزيم في إنتاج البناتالي ربح يقول (phenylpyruvate) ويصير يسر ربح | | → causes retardation. - Aspartame Alitame ✓ |