



**Figure 1. Schematic illustration of three types of autophagy.** The key differences among these autophagy forms lie in the methodology of lysosomes capturing the substrates. Macroautophagy is characterized by the formation of intermediate double-membrane structures including autophagosome and autolysosome. The cargos are engulfed in the vesicles and then degraded together through fusion with lysosomes. Chaperon-mediated autophagy selectively recognizes substrate proteins containing KFERQ motif. The cargos are delivered into lysosomes mediated by chaperon protein HSPA8 and associated co-chaperons and lysosomal membrane protein LAMP2A, instead of establishing any sealed vesicles. Microautophagy is the simplest type of autophagy in which the cargos are directly engulfed by lysosomes independent of intermediate vesicles or substrate-targeting protein complex.