
Recombinant Human Granzyme H Protein (His tag)**Cat.NO.: TP08027**

3th Edition

Synonyms:CCP-X;CGL-2;CSP-C;CTLA1;CTSG2;GZMH

Description:Granzymes are key components of the immune response that play important roles in eliminating host cells infected by intracellular pathogens. Several granzymes are potent inducers of cell death. A total of eight granzymes (A-G and M) have been identified in the mouse, but only five are known in humans (A, B, H, M and granzyme 3), and granzyme H appears to be specifically human. Human granzyme H is a neutral serine protease that is expressed predominantly in the lymphokine-activated killer (LAK)/natural killer (NK) compartment of the immune system. In adenovirus-infected cells in which granzyme B (gzmB) and downstream apoptosis pathways are inhibited, granzyme H directly cleaves the adenovirus DNA-binding protein (DBP), a viral component absolutely required for viral DNA replication. This virus demonstrated that gzmH directly induces an important decay in viral DNA replication. Interestingly, gzmH also cleaves the adenovirus 100K assembly protein, a major inhibitor of gzmB, and relieves gzmB inhibition. Granzyme H has a very high amino acid identity (>90%) with many portions of the granzyme B sequence, particularly near the amino terminus of the molecule despite performing a distinct enzymic function.

Form:PBS**Molecular Weight:**26.7 kDa**Sequences:**Met 1-Leu 246**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.