**BACKGROUND**

Receptor tyrosine kinases (RTKs) represent an important class of transmembrane signaling molecules. Binding of the extracellular domain of an RTK to its cognate ligand leads to receptor dimerization and the activation of the intrinsic tyrosine kinase activity of its intracellular kinase domain. The Axl/UFO subfamily of receptor tyrosine kinases is comprised of members Tyro3 (also referred to as BYK, Brt, Dtk, Rse, TIF or Sky), Axl (also called Tyro7 or UFO) and Mer (also called Nyk, c-Eyk and Tyro12). Members of this family have a common molecular structure which contains an N-terminal extracellular domain comprised of two Ig domains, two FNIII domains and a membrane spanning single helix followed by the cytoplasmic tyrosine kinase domain. These RTKs are functionally significant in spermatogenesis, immunoregulation and phagocytosis. Tyro3, Axl and Mer are widely expressed in adult tissues, with their expression most abundant in brain, testis, lymphatic and vascular tissue. Tyro3 has been shown to undergo posttranslational modifications including both tyrosine phosphorylation as well as glycosylation. Two proteins, Protein S and Gas6, have been proposed as ligands for the Axl/UFO family of receptors. Both function as anti-coagulants through an unknown mechanism. Gas6 was cloned as a growth arrest-specific gene, while Protein S is an abundant serum protein which is thought to act by indirectly inhibiting proteases involved in the coagulation response.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TYRO3 (human) mapping to 15q15.1.

**PRODUCT**

Tyro3 (h): 293T Lysate represents a lysate of human Tyro3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.